

THE US ARMY: A RELEVANT FORCE--LEAPFROGGING
TO THE TWENTY-FIRST CENTURY

A thesis presented to the Faculty of the U.S. Army
Command and General Staff College in partial
fulfillment of the requirements for the
Degree

MASTER OF MILITARY ART AND SCIENCE
Strategy

by

TORI R. CARLILE, MAJ, USA
B.A., The Pennsylvania State University, University Park, PA, 1987

Fort Leavenworth, Kansas
2000

Approved for public release; distribution is unlimited.

DTIC QUALITY INSPECTED 4

20001120 127

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE 2 Jun 00	3. REPORT TYPE AND DATES COVERED Master's Thesis 7 Aug 99--2 Jun 00		
4. TITLE AND SUBTITLE The US Army: A Relevant Force--Leapfrogging to the Twenty-first Century		5. FUNDING NUMBERS		
6. AUTHOR(S) MAJ Tori Carlile, USA				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Command and General Staff College ATTN: ATZL-SWD-GD 1 Reynolds Ave. Ft. Leavenworth, KS 66027-1352		8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/ MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSORING/MONITORING		
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.		12b. DISTRIBUTION CODE A		
13. ABSTRACT (Maximum 200 words) This paper analyzes the Army, its relevance as determined by the service's ability to support national security strategy, operational theater strategies, and joint and combined tactical strategies, with an eye toward the emerging environment. These requirements guide the discussion to determine what kind of ground force would be appropriate for future conflict? In determining how the Army will adjust to meet requirements, the analysis will argue the service must balance developing warfighting readiness against furthering peacetime engagement capabilities. Accordingly, this study looks at the Army's capability to respond rapidly and decisively to threats, from major theater war to small scale contingencies, and counterterrorism operations. Disjointed efforts have found the force losing its relevance at the strategic and operational levels as the Army was no longer offering sufficient capabilities to the National Command Authority (NCA) and warfighting commanders-in-chief (CINCs). Equally impeded by the Army's disjointedness was the development of sufficient US strategic lift. Perhaps most significantly affecting the Army's ability to focus on future force development was its sizable investment in conventional Cold War weapon systems and its reluctance to trade current readiness for the future. The personal commitment of the new Army leadership though seems bent on reestablishing service relevancy.				
14. SUBJECT TERMS The Army and its relevance in national security, adaptive joint force package, joint Contingency force, twenty-first-century Army		15. NUMBER OF PAGES 142		
		16. PRICE CODE		
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT UL	

THE US ARMY: A RELEVANT FORCE--LEAPFROGGING
TO THE TWENTY-FIRST CENTURY

A thesis presented to the Faculty of the U.S. Army
Command and General Staff College in partial
fulfillment of the requirements for the
Degree

MASTER OF MILITARY ART AND SCIENCE
Strategy

by

TORI R. CARLILE, MAJ, USA
B.A., The Pennsylvania State University, University Park, PA, 1987

Fort Leavenworth, Kansas
2000

Approved for public release; distribution is unlimited.

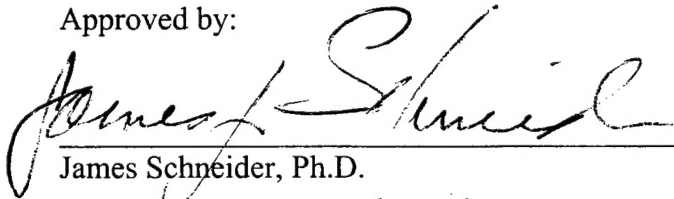
MASTER OF MILITARY ART AND SCIENCE

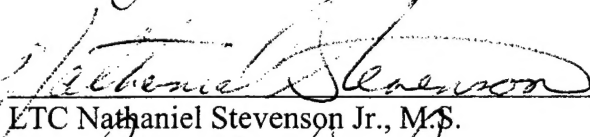
THESIS APPROVAL PAGE

Name of Candidate: MAJ Tori R. Carlile

Thesis Title: The US Army: A Relevant Force--Leapfrogging to the Twenty-first Century

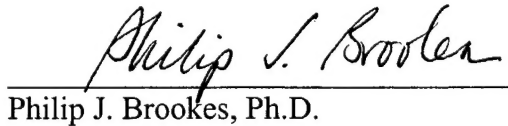
Approved by:

_____, Thesis Committee Chairman
James Schneider, Ph.D.

_____, Member
ETC Nathaniel Stevenson Jr., M.S.

_____, Member
MAJ Steven Rauch, M.A.

Accepted this 2d day of April 2000 by:

_____, Director, Graduate Degree
Philip J. Brookes, Ph.D. Programs

The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement)

ABSTRACT

THE US ARMY: A RELEVANT FORCE--LEAPFROGGING TO THE TWENTY-FIRST CENTURY by MAJ Tori Carlile, USA, 140 pages.

This paper analyzes the Army, its relevance as determined by the service's ability to support national security strategy, operational theater strategies, and joint and combined tactical strategies, with an eye toward the emerging environment. These requirements guide the discussion to determine what kind of ground force would be appropriate for future conflict?

In determining how the Army will adjust to meet requirements, the analysis will argue the service must balance developing warfighting readiness against furthering peacetime engagement capabilities. Accordingly, this study looks at the Army's capability to respond rapidly and decisively to threats, from major theater war to small scale contingencies, and counterterrorism operations.

Disjointed efforts have found the force losing its relevance at the strategic and operational levels as the Army was no longer offering sufficient capabilities to the National Command Authority (NCA) and warfighting commanders-in-chief (CINCs). Equally impeded by the Army's disjointedness was the development of sufficient US strategic lift. Perhaps most significantly affecting the Army's ability to focus on future force development was its sizable investment in conventional Cold War weapon systems and its reluctance to trade current readiness for the future. The personal commitment of the new Army leadership though seems bent on reestablishing service relevancy.

ACKNOWLEDGMENTS

First and foremost I thank Dr. James Schneider of the SAMS department who was an exceptional mentor for helping me bring sanity to the MMAS process. Equally important in helping my thesis evolve were Dr. Bruce Menning, who offered terrific insights into the world of methodology, and LTC Nathaniel Stevenson and MAJ Steve Rauch who provided very appreciative reviews and discussion on the unfolding analysis. Additionally, I would like to thank Helen Davis for her most welcome proofing. Also, I wish to thank the research folks at CARL for their most appreciated support, my staff group leader LTC Chuber for his support in getting the program off and running, and my staff group for their continued discussions and topic updates.

Most importantly, I wish to thank my very dear and loving family who helped make this the best year of our lives, despite the tremendous study requirements. Ultimately, I owe success of this project to my wife Siobhan who selflessly endured many hardships in taking the helm through these many months. And lastly, I thank the neighbors and youth coaches who helped develop our three daughters, Brenna, McKenna, and Ciaran, and shared unselfishly of themselves throughout the year.

CONTENTS

APPROVAL PAGE	ii
ABSTRACT	iii
ACKNOWLEDGMENTS	iv
LIST OF ACRONYMS	vii
LIST OF ILLUSTRATIONS	xii
CHAPTER	
1. INTRODUCTION	1
2. LITERATURE REVIEW	16
3. METHODOLOGY	28
4. ANALYSIS	35
Relevance	37
Historical	39
Strategic	45
Operational	48
Tactical	53
Force Structure	56
Current	58
Projected	64
Force Projection	70
Forward Based vs. Deployed	73
Deployment Capabilities	75
Barriers to Relevancy	77
Focus-Disunity of Purpose	78
Complexity	80
Force Projection	83
Opportunity Costs	84
The Way Ahead	85
Future Security Environment Scenario	88
Doctrine Overhaul	94
Force Redesign	98
5. CONCLUSIONS AND RECOMMENDATIONS	115

BIBLIOGRAPHY	120
INITIAL DISTRIBUTION LIST	128

LIST OF ACRONYMS

AAN	Army After Next
AC	Active Component
ACTD	Advanced Concepts Technology Demonstration
AECF	Army Experimental Campaign Plan
AEF	Air Expeditionary Forces
AJFP	Adaptive Joint Force Package
AMC	Air Mobility Command
AOE	Army of Excellence
AOR	Area of Responsibility
ARBG	Amphibious Ready Battle Group
ARG	Amphibious Ready Group
ARCENT	Army Forces Central Command
ASMP	Army Strategic Mobility Program
AWE	Advanced Warfighting Experiment
BOS	Battlefield Operating System
CALL	Center for Army Lessons Learned
CFP	Contingency Force Package
CINC	Commander-in-Chief
CINCUSJFCOM	Commander-in-Chief United States Joint Forces Command
CINCCENT	Commander-in-Chief Central Command
CINCEUR	Commander-in-Chief European Command
CINCPAC	Commander-in-Chief Pacific Command

CJCS	Chairman Joint Chiefs of Staff
CMOC	Civil-Military Operations Center
CNO	Chief of Naval Operations
CPG	contingency planning guidance
CS	Combat Support
CSS	Combat Service Support
CSA	Army Chief of Staff
DCSLOG	Deputy Chief of Staff for Logistics
DIME	diplomatic information military economic
DLA	Defense Logistics Agency
DoD	Department of Defense
ELB	extending the littoral battlefield
ESB	enhanced separate brigade
EW	electronic warfare
EU	European Union
EUCOM	European Command
FAS	feasibility acceptability suitability
FEMA	Federal Emergency Management Agency
FORSCOM	Forces Command
FY	Fiscal Year
GO	governmental organization
IATF	Interagency Task Force

ISR	intelligence surveillance and reconnaissance
JCF	joint contingency force
JFC	joint forces commander
JEF	joint expeditionary force
JTF	joint taskforce
JSCP	Joint Strategic Capabilities Plan
JTASC	Joint Training and Simulation Center
JV2010	Joint Vision 2010
LOTS	logistics-over-the-shore
MACOM	major command
MAV	medium assault vehicle
MEF	Marine Expeditionary Force
MEU	Marine Expeditionary Unit
MILDEPS	military departments
MLRS	multiple launch rocket system
MRC	major regional conflict
MSC	Military Sealift Command
MTMC	Military Traffic Management Command
MTR	military technical revolution
MTW	major theater war
NCA	National Command Authority
NGO	nongovernmental organization
NMS	National Military Strategy

NSS	National Security Strategy
OPTEMPO	operational tempo
OOTW	Operations Other Than War
PDD	Presidential Decision Directive
PGM	precision guided munitions
PLS	palletized load system
QDR	Quadrennial Defense Review
RC	Reserve Component
RMA	revolution in military affairs
RML	revolution in military logistics
RORO	roll-on-roll-off
RSTA	reconnaissance surveillance targeting and acquisition
SASO	stability and support operations
SECDEF	Secretary of Defense
SOF	special operation forces
SPOD	surface port of debarkation
SSCO	small-scale contingency operations
STRATCOM	Strategic Command
SU	situational understanding
TAA	Total Army Analysis
TAP	The Army Plan
TAV	total asset visibility

TEP	Theater Engagement Plan
TOE	table of organization and equipment
TPFD	time phased force deployment
TRAC	TRADOC Analysis Center
TRADOC	Training and Doctrine Command
TTP	tactics, techniques, and procedures
USJFCOM	United States Joint Forces Command
USPACOM	United States Pacific Command
WMD	weapons of mass destruction
VTOL	vertical take-off and landing

LIST OF ILLUSTRATIONS

Figure		Page
1.	National Interests	8
2.	Strategy and Warfare	12
3.	Range of Military Operations	29
4.	Cold War Stability	36
5.	Post Cold War Reality	37
6.	MOOTW Contributions to National Security Objectives	38
7.	Role of the Army in Joint Operations	44
8.	National Strategic Direction	49
9.	Redefining Missions. . . In a Changing World	60
10.	Current Force Structure (division oriented)	61
11.	It Takes the Total Army	63
12.	Future Force Structure (brigade oriented)	70
13.	Army Strategy for Developing the Future Force	94

CHAPTER 1

INTRODUCTION

Every age had its own kind of war, its own limiting conditions, and its own peculiar preconceptions. Each period, therefore, would have held its own theory of war.¹

Clausewitz, *On War*

The utility of thinking about war carries no inherent advantages for forces of any particular era. Reflecting on war today carries with it the same benefits and complexities it did for Clausewitz in his time. Similar to the French dominating Europe at the turn of the nineteenth century (1790-1810), the US dominates the world today. Though admittedly without similar territorial ambitions, the US has nonetheless a multitude of potential adversaries who want to reduce its superpower status as European monarchies wanted to squash the influence of Napoleon. Clausewitz and others of that era studied Napoleonic warfare to identify the secret of success. And Jomini's analysis of the science of warfare so impressed Napoleon he feared educated adversaries would be able to counter his tactics.² Just as adversaries through time have studied their rivals, potential adversaries are studying US strategies and doctrine to determine and exploit US vulnerabilities.

History is replete with examples of superior forces failing to adapt, while adversaries more readily employed new technologies and methods for warfighting. The Swedes under Gustavus Adolphus revolutionized the combined arms employment of infantry, cavalry, and artillery as demonstrated in 1631 during the battle of Breitenfeld.³ According to J.F.C. Fuller, this Swedish victory of mobility and firepower over superior

forces forced virtually the rest of Europe to revise their fighting methods. This they promptly did, resulting in the subsequent defeat of Sweden at the hands of its own tactics. Two centuries later, the Prussians under Bismarck employed new technology in the form of the needle gun, routing the purportedly superior Austrian forces at Koniggratz in 1866 and bringing an end to the Austro-Hungarian Empire.⁴

Future threats in turn will attempt to overcome the apparent advantages of US forces by mitigating the tremendous technological advantages of this lone superpower.⁵ Interestingly, the US finds itself in a precarious situation today where the Army had slashed research and development, and modernization funding, at the expense of maintaining a large heavy weighted force to counter an unlikely threat. This approach has resulted in lower demand for US Army forces and in higher operations tempo (OPTEMPO) for the few heavy forces deemed prepared for the assorted missions.⁶ Adding insult to injury, the US Army's reduced significance in recent years has resulted in lower defense appropriations.

The strategic importance of the US Army is evident at the highest levels of the nation's national security apparatus. In requesting increased defense spending recently, the executive branch has called the military the backbone of US national security strategy, and went on to single out Army assets.⁷ This thesis in turn will discuss the relevance of the Army today when looking first at the criteria specified by the national command authority and the warfighting CINCs. The Army is putting considerable effort into evaluating its current force structure and service-wide readiness to conduct missions across the military spectrum. These ongoing efforts would lend the military observer to

conclude the service has in fact identified shortcomings in its current capabilities and is diligently working to overcome these deficiencies.

Culling the criteria against which US Army relevance will be measured from congressional testimonies on readiness and stated theater strategies has resulted in a number of requirements that will be discussed in the course of this analysis. In the process of determining how the Army will adjust to meet these requirements, the analysis will argue the service must balance developing warfighting readiness against furthering peacetime engagement capabilities. Accordingly, the first criterion for evaluating the Army is its capability to respond rapidly and decisively to threats, from major theater war to small scale contingencies, and counterterrorism operations. Secondly, these forces must be able to coordinate closely with other US, coalition, and nongovernmental elements to enhance the synergy and efficiency of efforts. Third, the Army must be able to respond effectively to nonconventional and asymmetrical capabilities. Fourth, in determining the service's ability to respond to threats, the Army must develop force projection capabilities to overcome forward presence constraints. And finally, Army forces must be prepared to support a growing role in support of disaster relief operations and domestic support to civil authorities, during natural disasters and in support of civil law enforcement agencies.

Developing the agile force to meet these requirements will help the Army reverse the trend over the last few years that has shown the Army is not the force of choice when the US confronts an adversary.⁸ Reminiscent of the early 1900s when Marines replaced Army expeditionary forces in the Caribbean after nearly two decades of police action, the Army has once again taken a supporting role.⁹ Reflecting today's global security

environment where the services have each taken the lead in specific missions, the US Army is writing doctrine for the force in a supporting role to the efforts of air and naval forces. This realization comes at a time when critics have claimed the Air Force alone can win the nation's wars.¹⁰

Proponents of the Halt Phase Strategy, the concept that the Air Force alone can win the nation's wars by "halting" the aggressor, today argue the strategy is based upon a claim that air- and space-based sensors will enable anything on the battlefield to be located and destroyed with precision munitions. Advocates take the argument to the extreme though when they suggest airpower alone, within two weeks, can stop enemy forces short of their objectives. Incredibly, this argument survives fifty years after Claire Chennault, who was advocating a speedy end to war in the Pacific, first presented it to President Franklin Roosevelt.¹¹ Chennault claimed a force of 150 fighters and 42 bombers could probably beat Japan within six months. Ground forces were committed years ago in the Pacific, as they were required more recently in Khafji to expel the occupying forces.¹² Attempting to breath new life into the argument, Tilford, suggests the Air Expeditionary Force (AEF) though is the means by which airpower now can counter aggression across the spectrum of conflict.¹³

Today, amidst the uncertain global environment, the Army finds itself reinventing its role in support of the national defense. A necessary effort to adjust to change, done well, the Army should emerge stronger as the Marine Corps did when it developed amphibious warfare doctrine to guide its emerging role in world affairs.¹⁴ The inherent complexities and expense of moving heavy forces quickly is one factor complicating the Army's role in executing the national military strategy (NMS). The other services are

able to self-deploy in times of crisis while the Army behemoth cannot readily deploy to war. Consequently, the massive logistical burden of deploying today's Army overwhelms the decision makers who might otherwise choose to leverage its capabilities. Deploying the Army today generally forces a determination of the relative worth of reconfiguring common lift assets to move land forces, assets that would otherwise be supporting Air Force or Naval efforts. Under its current heavy force structure, the Army will likely continue to get the short end of the stick. Critics argue the Air Force will continue to be the initial force committed to wars of attrition as the US attempts to minimize friendly casualties and should accordingly have all the necessary lift to support a protracted air campaign.¹⁵

Looking at the current state of affairs many critics, such as defense analysts Michael Vickers, John Hillen, and Harry Summers, believe heavy US land forces have outlived their purpose overseas and point to the large (and largely nondeploying) continental Army.¹⁶ For the better part of this century the US Army had prepared to fight a large-scale armored war in Europe. Consequently, the defense establishment has come to think of this style of war as the norm, with the military industrial complex churning out replacement equipment designed to offer more advantages to the same style of warfare. Precious little innovative thinking finds the US Army largely continuing to plan for an unlikely armored war.¹⁷ Meanwhile, technology is advancing so quickly that the Army will integrate twenty-first-century advances on legacy platforms. Even the vaunted strike force concept recently touted to be the Army's vanguard was tied to comparatively obsolete weapon platforms.¹⁸ The Army needs to reinvent itself and adjust its force

structure accordingly. The Army Plan (TAP) needs to be revised to provide the agile, lethal and sustainable force the new Chief of Staff of the Army (CSA) has identified.

Accordingly, the research question of this thesis asks, What kind of ground force would be appropriate for future war? A survey of recent literature suggests the geopolitical environment today demands a change in Army strategy and tactics as reflected in CINC theater strategies.¹⁹ Traditionally, the Army has developed its warfighting strategy based on the grand strategists of large-scale war on the European plains.²⁰ Based on the force requirements since the end of the Cold War and Desert Storm, the Army should prepare its forces differently to face the evolving threats and the more likely missions. Consequently, this self-actualization will likely suggest the answer to the research question centers around how the Army has predominately been employed over the last decade and what it should expect for the future.

Discussion in this thesis is therefore based on three major premises. First, peace operations are the predominant mission facing US forces today and are the most likely mission to be faced in the multipolar future as the US continues its policy of global engagement. Second, landpower is critical to supporting this national security strategy (NSS) imperative. Third, the Army is not sufficiently developing its forces in accordance with the second premise. The first two premises are widely presented by senior officers, scholars, and strategists and are overwhelmingly supported in the literature review. The third premise is a contrarian view, and accordingly less freely discussed than the others, but nevertheless gaining interest among the defense community. The third premise is perhaps more significant than the other two, because discounting its significance suggests there is no cause for concern. Altogether, these premises focus the research on the

impact of change--changing world order, globalization, national priorities--and how the Army could adjust its strategy and force structure to better support US national and CINC theater strategies.

A more capable Army will provide operational and strategic planners with greater options for employing US land forces. In turn, changes to strategy incorporating new capabilities at the tactical and operational levels will likely affect development of national strategies.²¹ In discussing strategic art at the Army War College, Major General Chilcoat suggests the simultaneous revolutions in military affairs, technology, and information and the reordering of the international system have shattered traditional boundaries, merging the levels of war where actions at any level often have immediate results across all levels.²² The merging of the levels of war requires novel approaches for matching strategy with operations and should draw from all instruments of power in developing national security strategies (see figure 1). As General Chilcoat notes, the US has suffered too many foreign policy lapses due to uncoordinated approaches. US national security policy makers must incorporate all aspects--diplomatic, informational, military, and economic when formulating strategies.

Historically, strategists and operators have been unable to incorporate fully technological advances into revised tactical methods or toward implementing new national policies.²³ Many aspects of US land warfare strategy derived from Napoleon two centuries earlier still influence how the Army is organized and prepared to conduct battle today and should in their outdated conditions be discarded.²⁴ The AirLand Battle doctrine that led the Army through the tumultuous 1980s and Desert Storm drew on the

best of Napoleon and Sun Tzu, emphasizing maneuver, firepower, depth, and the human dimension of war.

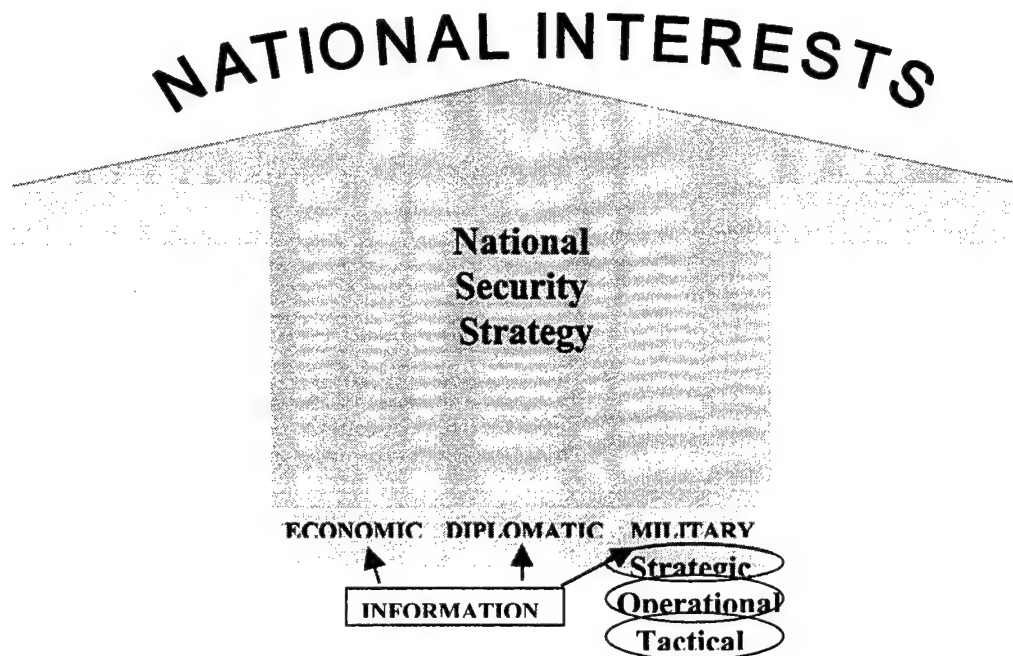


Figure 1. derived from Chilcoat, *Strategic Art*, 2.

Later versions of service doctrine have focused on a force projection Army, with greater strategic responsibilities oriented on technology to meet the challenges of a new era. Brian Reinwald cautions the military against devoting undue attention to technology as a force multiplier at the expense of force structure and sound tactics.²⁵ Guderian's blitzkrieg tactics emphasizing shock and maneuver, with the proper combination of tactics and technology, were employed with tremendous success in the great left hook of Desert Storm and should remain the model for twenty-first century warfare. His emphasis on maneuver warfare and the indirect approach to attacking weakness broke the spirit and will of contemporary forces by pushing attacks quickly through to their rear. The shared vision of Secretary of the Army Caldera and CSA Shinseki, in introducing

lighter more lethal, maneuverable forces, would appear to support lightning tactics for the future. And Sun Tzu's philosophy on the human dimensions of war, increasingly important in asymmetric warfare, along with William Johnsen's concept of preventive defense, may also prepare US forces for the myriad of threats and the responses the Army will offer.²⁶

The dynamic and uncertain global security environment demands an Army force structure that is in line with current NSS objectives. The unwieldy military machine of the Army today is unsuitable for many of the missions it has been asked to perform.²⁷ The current US force structure is antiquated and supports Army doctrine to fight yesterday's AirLand Battle. To support national and theater strategies, the Army needs to skip a generation or two in weapons development to provide a relevant force structure quickly.²⁸ Recent Army posture statements acknowledge this reality as they praise Army XXI efforts to hold the line on readiness while Army After Next (AAN) looks toward future conflict.²⁹ The leapfrog strategy is a concept discussing this approach that aims to help the US develop an agile and flexible force by disrupting the status quo and dismissing incremental improvements to the force.³⁰ General Shinseki's initiatives with the interim brigades will buy the time to develop and create the objective future force, realizing that the next iteration of system procurement is projected for 2010, when the future combat system is scheduled to be built. This concept is reflected in current Army initiatives and will be discussed more fully under the force structure section.

Mazarr, editor of the *Washington Quarterly* and director of the New Millennium Project at the Center for Strategic and International Studies, is a leading theorist who believes the leapfrog strategy is what the US military needs to be ready for the next full-

blown war and in the process to be able to respond to peacekeeping and other operations other than war. These stability and support operations (SASOs) as the Army now refers to them should not take away the focus of US force development and modernization efforts. Caldera and Shinseki reaffirm the Army's commitment to fight and win the nation's wars, while developing improved capabilities across the spectrum of conflict.³¹ An adaptable force will give the National Command Authority (NCA) the flexibility needed in executing the NMS and will reinstate the Army with a relevant role for the future. In determining the appropriate future force, the US Army needs to embrace revolutionary thinking to truly benefit from the revolution in military affairs (RMA).³²

A few assumptions will assist in preparing this thesis. First, the limitations of heavy forces today outweigh their advantages. Second, the logistical requirements of heavy forces limit their role in twenty-first century warfare. Third, current heavy forces are not versatile enough to meet land warfare requirements in the future battlespace.

These assumptions form the basis of this analysis and are believed reasonably founded. In addressing these assumptions, this study has tremendous potential to improve the US Army's ability to support the execution of strategic and operational strategies as reflected in CINC theater engagement plans (see figure 2). Substantial discussions of strategy and future land warfare promote a dynamic role for the Army in meeting Title 10 requirements, to train, equip, and provide forces to the warfighting CINCs while anticipating future threats and maintaining an appropriately balanced force to conduct peace operations.³³ The Army's readiness (and the inclination of national leadership) to deploy in force from the continental US has diminished. As reflected in Commander-in-Chief United States Joint Forces Command (CINCUSJFCOM) testimony

before congress, Admiral Gehman notes there is a dangerous shortcoming in US readiness and force projection capabilities.³⁴ In response, the Army needs to develop and field an appropriate force, with corresponding adjustments to its warfighting strategy, to prepare itself for the future.

Today, with its diminished power projection capability, the US Army is increasingly failing to meet its statutory obligations. The CINC theater strategies and posture statements identify force requirements to support regional strategies.³⁵ The military departments (MILDEPS) are charged with coordinating amongst themselves and the combatant commands to organize, train, equip, and provide capable forces required by the warfighting CINCs to support NCA directives. Unfortunately, the Army currently lacks the deployability, adaptability, survivability, and sustainability capabilities across the force to fully meet CINC requirements.³⁶ Of late, the US Marine Corps has been extending its amphibious operations ashore to provide forces the Army should otherwise supply to meet land warfare requirements. In Kosovo, for example, the Marine Corps committed the 26th Marine Expeditionary Unit (MEU) to the operations, disembarking the force in Greece and driving it overland six hours to reach the intermediate staging base in Skopje, Macedonia.³⁷

STRATEGY AND WARFARE

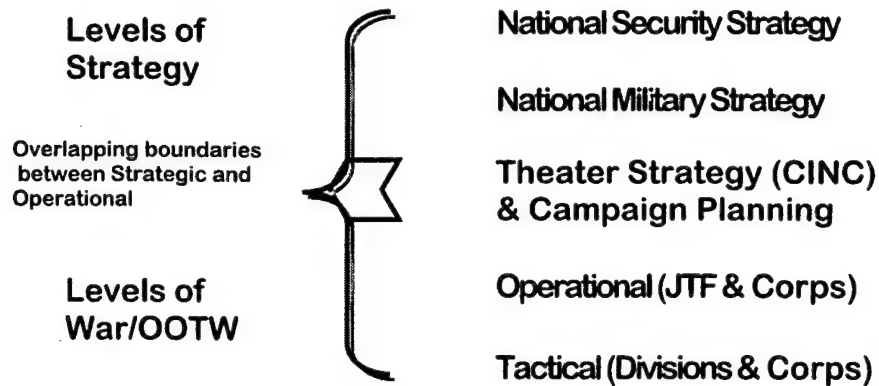


Figure 2. Source: Chilcoat, *Strategic Art*, 3.

These arguments are explored more fully throughout the thesis, drawing from plentiful sources of discussion. The following chapter reviews related literature and discusses how the publications contribute to the analysis of the Army as a relevant force for the twenty-first century. Theories on warfare are reviewed in the process of determining an appropriate force and associated tactics for the future. Surprisingly, the majority of publications suggest the global environment will be more complex than that of the recently concluded Cold War. Rather than concluding future conflict will be simpler in the absence of a contemporary rival, theorists argue the emergence of asymmetric threats will magnify the complexity of warfare.³⁸ The simplicity of developing forces to counter threats by battlefield operating system (BOS) during the Cold War is now incrementally complicated with the emergence of asymmetric threats. Other authors refer to previous cycles in warfare when attempting to propose a better focus for US efforts. In total,

these arguments offer many possibilities for updating US Army doctrine and refocusing efforts to meet current and emerging national security interests-- interests substantially different in the last decade alone. The referenced publications present many thoughts on future force development, global influences, and likely threats facing US forces.

¹ Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1984), 28.

² Larry Addington, *The Patterns of War Since the Eighteenth Century* (Bloomington, IN: Indiana University Press, 1994), 44.

³ Peter Paret, *Makers of Modern Strategy* (Princeton, NJ: Princeton University Press, 1986), 48.

⁴ Addington, 99.

⁵ John Barry, "The 21st Century Battle Plan," *Newsweek*, 1 January 2000, 36.

⁶ Eric Shinseki, "Chief of Staff Expands on Army Vision," *Army News Link*, 31 January 2000, 2.

⁷ White House, *Supporting the World's Strongest Military Force* (FY 2000 Defense Budget statement, Washington, DC: White House Press Office, 1999); available from <http://www.whitehouse.gov/wh/eop/op/budget2000/defense.html>; Internet; accessed on 12 December 1999.

⁸ Louis Caldera, "The Army Vision," Army Press Release, October 1999.

⁹ Dr. Lawrence Yates, "The USMC Between the Wars," *The Evolution of Modern Warfare Book of Readings* (Fort Leavenworth, KS: Combat Studies Institute, 1999), 7.

¹⁰ Earl Tilford, *Halt Phase Strategy: New Wine in Old Skins* (Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, July 1998), 1.

¹¹ Ibid., 10.

¹² Ibid., 8.

¹³ Ibid., 12.

¹⁴ Allan Millett, "Semper Fidelis: The History of the United States Marine Corps," in *The Evolution of Modern Warfare Book of Readings* (Fort Leavenworth, KS: Combat Studies Institute, 1999), 35.

¹⁵ Tilford, "Operation Allied Force and the Role of Air Power," *Parameters* 29, no. 2 (winter 1999): 24.

¹⁶ Thomas Ricks, "Ground Zero, Military Must Change for the 21st Century: Question is How?" *Wall Street Journal*, 12 November 1999, 1.

¹⁷ Lonnie Henley, "The RMA After Next," *Parameters* 29, no. 2 (winter, 1999): 47.

¹⁸ Elizabeth Stanley, *Evolutionary Technology in the Current Revolution in Military Affairs* (Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, March 1998), 1.

¹⁹ Bernard Rogers, "Determining National Strategy," *Army* December 1999, 43.

²⁰ Bradley Graham, "For the Tank, A New Tread of Thought," *Washington Post*, 6 November 1999, 3.

²¹ David Jablonsky, *Why is Strategy Difficult?* (Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, June 1992), 19.

²² Richard Chilcoat, *Strategic Art: The New Discipline for 21st Century Leaders*, (Carlisle Barracks, PA: US Army War College, Strategic Art Series, 10 October, 1995), 2.

²³ Bernard Brodie, "Technology, Politics, and Strategy," in *American Security Policy* (Baltimore, MD: John Hopkins University Press, 1999), 82.

²⁴ Robert Epstein, "Patterns of Change and Continuity in Nineteenth-Century Warfare," *Supplemental Readings on The Evolution of Modern Warfare* (Fort Leavenworth, KS: Combat Studies Institute, 1992), 43.

²⁵ Brian Reinwald, *Forsaken Bond: Operational Art and the Moral Element of War* (Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, May 1998), 7.

²⁶ William Johnsen, *Future Roles of US Military Power and Their Implications* (Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, April 1997), 6.

²⁷ Jeffrey Record, *The Creeping Irrelevance of US Force Planning* (Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, May 1998), 4.

²⁸ George W. Bush (comments during Republican Presidential Debates, January-March 2000) recorded by author, Fort Leavenworth, KS, January-March 2000).

²⁹ Office of Chief of Staff, *Army Posture Statement FY98* (Washington, DC: Department of the Army, 1997), 13.

³⁰ Michael Mazarr, "Chaos Theory and US Military Strategy: A 'Leapfrog' Strategy for US Defense Policy," *Complexity, Global Politics, and National Security*, ed. David Alberts and Thomas Czerwinski (Washington: National Defense University Press, 1997), 303.

³¹ Gerry Gilmore, "Army to Develop Future Force Now, Says Shinseki," *Army Link News*, 24 November 1999, 3.

³² Timothy Heinemann, "Full-Dimension Operations Planning Constructs: Thinking 'Out of the Box' for the 21st Century" (Master's thesis, Fort Leavenworth, KS: US Army Command and General Staff College, May 1995), 8.

³³ Amos Jordan, William Taylor, and Michael Mazarr, *American National Security* (Baltimore, MD: John Hopkins University Press, 1999), 86.

³⁴ Ibid.

³⁵ William Mendel and Graham Turbiville, *The CINCs' Strategies: The Combatant Command Process* (Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, December 1997), 5-7.

³⁶ John Hamre, (remarks provided to the National Security Telecommunications Advisory Committee, Washington, DC, 9 June 1999).

³⁷ Tori Carlile, "Personal notes from service on the Joint Staff/J6 1996-1997 and in the CINC support cell at the Joint Spectrum Center 1997-1999, Annapolis, MD" July 1999.

³⁸ Robert Kaplan, "The Coming Anarchy," *The Atlantic Monthly* 273, no. 2 (February 1994): 7.

CHAPTER 2

LITERATURE REVIEW

Reviewing the many publications discussing warfighting strategies and the future of war has been fascinating. The current RMA and the preceding military technical revolution (MTR) have generated substantial interest in these areas. The MTR as defined by General Sullivan and Colonel Dubik is a revolution in five dominant capabilities that will have a dramatic effect on the Army and land warfare: lethality and dispersion; volume and precision fire; integrative technology; mass and effects; and invisibility and detectability. Some of the key works drawn from in the course of this analysis are: *War and Anti-War* (Tofflers 1992); *Future Roles of US Military Power and Their Implications* (Johnsen 1997); and recent Army Posture Statements. CINC Posture Statements, Theater Strategies, and Congressional Testimony are expected to be the driving forces behind developing Army capabilities. Additionally, *Redefining Land Power for the 21st Century* (Johnsen 1998) provides a good discussion on the cloudy nature of military power and debates on future force structure. Further, discussions offered by General Sullivan and Colonel Dubik will add substantial relevance to this study. Lacking an official definition or discussion of land power has heretofore hampered formulation of policy options that would improve land power versatility. The many references studied during this analysis present far-ranging discussions from diverse sources that will help clarify the future role of land power and reaffirm its relevance in American national security.

CSA General Shinseki's recently released *Army Vision* calls for a more strategically responsive US Army and announced a bold initiative where he intends to

build medium-weight forces into the Army force structure. Shinseki believes heavy forces are becoming technologically obsolete, with lighter maneuverable forces possessing many advantages. Spearheading the effort, the CSA plans to develop the initial two brigades from forces currently existing at Fort Lewis, leveraging these forces later to build the first of perhaps five divisions. His concept calls for this new force to bridge the gap between existing light and heavy forces to quickly enable the Army to deploy more capable forces to troublespots. Shinseki intends for the initial brigades to be fielded within a year by streamlining force development and aggressively using off-the-shelf technologies. The enlightened Army secretariat is correcting the shortcomings of land forces support to the NMS, and in turn hoping to reduce the extremely high OPTEMPO of US forces.

Sullivan as quoted in "American Army Doctrine for the Post-Cold War," *TRADOC Historical Monograph Series* undertook efforts to revise the Army capstone doctrine, FM 100-5, *Operations*, as the engine of change for the Army in the emerging era.¹ Sullivan saw the Army at a crossroads similar to the time when Ulysses Grant was organizing the Army for the first campaign of the industrial age. Except now he saw himself as bearing the cross for transforming the Army to the realities of the post-industrial age. Sullivan believed that warfare in the early 1990s had come to a point where raw might and large armies were unnecessary and insupportable, having been displaced by the information age. He stated his views that doctrine should change to accommodate these new developments and that it should be the foundation for organizational design, training, leader and combat developments, and acquisition.

Avoiding Agincourt: Restructuring Command and Control for the 21st Century

portrays the Army's place on the brink of a RMA and proposes how significant advances in technology and precision warfare are providing unprecedented potential for future warfare.² Implementing these advances challenges traditional battle command and precipitates further changes to US doctrine. Drawing from historical lessons, the author emphasizes the role uncertainty has played. The discussion also evaluates Martin van Creveld's three command forms in recommending an appropriate type of battle command for the future battlespace. Implications of this study recommend changes to leader development and suggest the Army of the future needs farsighted leadership to put the big picture together now so that the force development process can prepare for the AAN.

In *Chaos Theory and US Military Strategy: A 'Leapfrog' Strategy for US Defense Policy*, the author reflects on applying chaos theory to US military strategy and force structure.³ He notes the successful companies enthusiastically pursue change, quoting an oft-repeated statement that, "there are only two kinds of companies, the disruptive and the dead." Again leveraging successful business models, the leapfrog strategy compares industry leaders who claim their successes are largely due to, "being shackled neither by convention nor by respect for precedent."⁴ These proven concepts can help the military in a similarly complex, chaotic, and dynamic era.

Just as business strategists of the future will seek to disrupt the status quo of a particular industry, military strategists will seek to disrupt the status quo of military operations and to create advantages in the resulting chaos. In comparing the Army to society, Mazarr argues revolutionary thinking is absent from the mindset guiding US force structure planning today. He suggests that Army efforts to "hedge" against the

Russian hordes, while preparing to fight two nearly simultaneous regional contingencies, is rather obsolete incrementalist thinking.⁵ Further examples of this practice include equipping the US main battle tank, a 1970s weapon platform with the latest in global positioning system (GPS) and advanced cellular communications, and updating the primary infantry weapon, the M16 dating to the 1960s. These advances according to Mazarr represent evolutionary changes within the same mode of fighting that has prevailed in some cases for hundreds of years. True RMA he suggests is represented by an entirely new manner of warfare using information technology, precision guided munitions (PGM), and other advances to defeat the enemy without committing to the close fight on the battlefield.

The Current Interwar Years: Is the Army Moving in the Correct Direction?

evaluates the actions of the US to date during peacetime, acknowledging that the environment of the next conflict is drastically different from Desert Storm where the US employed fire and maneuver as it fought the AirLand Battle.⁶ The author offers a view of the future battlefield, noting the environment is much more complex than terrain alone, encompassing cultural, religious, and moral differences. The study analyzes a similar period in history, that following World War I where France was the preeminent power on the European continent. The technological advances of the day were readily embraced by the various European powers, and France failed to see the potential as clearly as a couple of upstarts, Nazi Germany and Stalinist Russia, did. History tells the story of a complacent Europe and of the terrible price paid in exchange for this unpreparedness. The study offers recommendations for the future US Army.

Forsaken Bond: Operational Art and the Moral Element of War suggests the Army is conceptualizing the performance of its primary missions--protecting and defending the Constitution and fighting the nation's wars without sufficient thought. Institutional changes and projected joint and Army doctrine reflect an increased reliance upon information technology as "the keys to wartime success and as panaceas to victory."⁷ The author suggests operational art has fallen victim to this thinking. Many current theorists neglect operational art as the core capability that draws upon technology as a force multiplier. Too many analysts neglect the importance of the human element of war and moral imperatives of senior leadership that have traditionally made the difference between victory and defeat. The author further suggests the real danger in neglecting the human facet of war is in reducing operations to a series of predictable steps that will make US forces predetermined to failure.

Full-Dimension Operations Planning Constructs: Thinking 'Out of the Box' for the 21st Century discusses how the current RMA is supported by technological advances and argues shifting paradigms reflect realities of globalization.⁸ The author suggests how, with all this fanfare and rich vision the Army is nevertheless hobbled by lingering Cold War mentalities. The study concludes that traditional planning concepts should be updated relevant to the present day. The US ought not simply to view the battlespace as a term to replace battlefield, but rather should take into account the multitude of influences beyond physical ones in this expanded three-dimensional environment.

Future Roles of US Military Power and Their Implications evaluates the changing national security environment and the Department of Defense (DOD) examination of how to reflect and support strategic priorities in the NMS.⁹ The study discusses the

appropriate forces structure necessary to implement this strategy taking into account technology as a force multiplier and how it affects the force. The author presents the demands national leadership will place on the military and suggests that the US needs to understand what its future requirements will be before it can tailor the forces accordingly. The author suggests the Army will continue its traditional roles of deterring war and supporting national defense, though he proposes the manner in which the US will execute these missions will change tremendously. He further analyzes the impact of preventive defense and its far-reaching impact on the military operating in a more visible diplomatic role.

Joint Expeditionary Forces: A Step Beyond builds upon the adaptive joint force package first proposed by Admiral Miller in 1992 in recommending an innovative force to meet dramatically changing global requirements.¹⁰ The joint expeditionary force (JEF) would be an integrated military and interagency package routinely deployed to address the myriad of peace operations encountered by US forces today. This concept would provide a more capable force drawing on the strengths of the services while complementing military forces with experienced nation building assistance from other governmental and nongovernmental organizations. In the age of declining defense budgets this arrangement would provide increased efficiencies and better meet the NCA's engagement imperative.

In *Landpower and Future Strategy: Insights from the Army after Next*, Wass De Czege and Echevarria argue that the US must develop a better vision of the future geostrategic environment to determine an appropriate NSS for continued engagement.¹¹ They believe current sources of conflict may intensify relative to the increase in global

population. The authors suggest potential adversaries are developing strategies for striking at US weaknesses by conducting asymmetrical warfare against the US, and that the US Army should prepare itself accordingly. Wass De Czege and Echevarria portray an almost surreal environment for the future battlespace where the traditional linear battlefield has been replaced by the multidimensional information based environment. Information operations builds upon this approach and is how the US intends to exploit communication mediums from space-based systems down to phone lines in waging offensive and defensive warfare. Wass De Czege and Echevarria propose that the US policy of engagement focus on shaping the peace through stability and support operations, that the US builds coalitions to respond to regional crises, and if necessary wage decisive campaigns to limit collateral damage and achieve durable peace.

An exciting article entitled *Medium-weight brigades: Army's part of joint force* restates Army requirements in support of amphibious operations as directed in DoD Directive 5100.1.¹² The article notes the Army's role in organizing, training, equipping, and providing forces in coordination with the other services for joint amphibious operations, and in developing doctrine and coordinated tactics, techniques, and procedures (TTP). The authors argue current Army forces are spread thin and believe the new medium-weight forces will increase capabilities. They believe the Army medium-weight brigade fills a complementary role in providing follow-on forces to support initial entry units, such as Marine Expeditionary Units (MEU) or Army rapid deployment forces. Very pointedly, the authors note Army forces were irrelevant in Albania, and suggest the Army will remain so unless it fills the void between heavy and light forces.

Another publication providing valuable input is *Nonlethal Weapons: Impact and Utility Concerns for Operational Commanders in Future Conflicts*.¹³ The author discusses the fact that the military operates in uncertain times and its future role is even more questionable. The rapidly changing world and increasing appearance of transnational threats, including organized crime create even more instability. To meet these ever present challenges the US Army must be prepared and rapidly deployable for any crisis. In conflict short of war the role of nonlethal weapons continues to grow in response to social desires to minimize weapon effects. The US receives tremendous political and moral support from the international community for taking the lead in this effort.

Reflections on the Signal Corps: The Power of Paradigms in Ages of Uncertainty portrays the information age reshaping the battlefield as the industrial age impacted warfighting earlier this century.¹⁴ The digitization of the battlespace has dramatically increased the synchronization of forces. Information technology is influencing the redesign of the Army as demonstrated by the advanced warfighting experiments. The US current force structure, doctrine, and weapon platforms are inadequate to fully harness these tremendous capabilities and give the military the associated agility, flexibility, and maneuverability on the future battlespace. The study suggests that the Army could do a better job at leveraging technology to give itself a more coordinated and offensive capability.

Dubik as quoted in *Seattle Post-Intelligencer*, "Reshaped Fort Lewis Brigades Will Take Aim at Quick Global Response," notes his role is integrating new high-tech weapons, combat doctrine, and training to convert the first two brigades to the medium-

weight force and test the latest Army concept for revitalizing the force.¹⁵ Dubik noted details of the conversion plan are still in the formulation process, though they expect to have procured the new equipment within the next twelve months, while simultaneously developing the necessary combat doctrine and training programs. He states the goal is to have a mobile, lethal combat force able to reach any trouble spot within 96 hours. Dubik concludes his comments by noting, “the trend-setting efforts are designed to create an organization so fast, it’s deployable lethality will deter any aggressor.”

The author of a *Small View of War: Toward a Broader FM 100-5* discusses how the nation’s security needs have changed dramatically since the Cold War.¹⁶ Acknowledging the possibility of the Army fighting a conventional army in the future, the discussion also suggests the Army is currently ill prepared to execute the diverse missions confronting the nation today let alone what is coming down the pike of the future. US political leadership expects the military services to play an increasing role in promoting democracy and protecting the peace. The Army should anticipate the required change in force structure and doctrine to better support these requirements. The most serious question facing the Army is whether it should develop a doctrinal model focusing on the most likely threat and tailoring its forces accordingly (while also maintaining the capability to address the most dangerous) or maintain the focus on an unlikely force-on-force scenario. Answered incorrectly, army doctrine and for that matter, the Army as an entity could face obsolescence.

In *Tao of War: Balance in the National Military Strategy* the author relates how the reality of a fluid future and perpetually conflicting interests between people and nations necessitates a balanced and more able force.¹⁷ The concept of preventive defense

should appear in the NMS, US military doctrine, and the Army vision for the future. The US force structure should reflect these ideas; force development and soldier training should demonstrate the flexibility of the Army which may prevent the escalation to war.

The *Instructional Joint Strategic Capabilities Plan* (JSCP) discusses how the deliberate planning process is initiated for the development of plans to support national security objectives. It demonstrates how the JSCP reflects the strategies provided in the NSS and NMS and follows direction provided by the Defense Contingency Planning Guidance (CPG). The document provides the strategic guidance necessary to coordinate the engagement and planning efforts of the combatant commanders in pursuit of national strategic objectives. It specifies regional objectives, minimum required regional tasks, planning assumptions, and apportions major combat forces and strategic lift for planning purposes. It provides full-spectrum planning guidance ranging from peacetime engagement objectives through nuclear response planning.

The CINC posture statements and congressional testimonies serve to identify the strategic and operational significance of events or issues within regional theaters and corresponding approaches to address these concerns. Translating national security policy down into operational strategies, the warfighting CINCs have developed corresponding theater engagement plans against which forces are apportioned. Their peacetime engagement strategies require constant adjustments, as the CINCs believe developing and maintaining forces and infrastructure for response across the threats spectrum is critical. In discussing their dependence on the service components to meet theater objectives, the CINCs admit US force capabilities must permit rapid response to regional contingencies, maintain supporting infrastructure for reinforcement and power projection, and support

engagement efforts. They also indicate the importance of balancing between maintaining readiness to support near-term requirements of shaping and responding to worldwide crises, and the long-term requirements of preparing for future national security challenges. In the end, the CINCs acknowledge the requirement to be able to transition from a posture of global engagement to fighting major theater wars.

The sources just reviewed represent only a fraction of the readily available information discussing this critical topic. The relevance of this subject is reflected in writings covering three levels of discussion: strategic, operational, and tactical. After becoming aware of the issues and understanding the ramifications of the Army's current readiness, the implications of past inaction by the service are incomprehensible. This literature review uncovers important concepts that the Army must consider in preparing itself for the future.

¹ John Romjue *American Army Doctrine for the Post-Cold War*, TRADOC Historical Series (Fort Monroe, VA: TRADOC Military History Office, 1996), viii.

² John Smith, "Avoiding Agincourt: Restructuring Command and Control for the Twenty-first Century" (Master's thesis, Fort Leavenworth, KS: US Army Command and General Staff College, 1998), 13.

³ Mazarr, 304.

⁴ Ibid., 309.

⁵ Ibid., 312.

⁶ Wayne Grigsby, "The Current Interwar Years: Is the Army Moving in the Right Direction?" (Master's thesis, Fort Leavenworth, KS: US Army Command and General Staff College, 1996), 11.

⁷ Rheinwald, 8.

⁸ Heinemann, 9.

⁹ William Johnsen, *Redefining Land Power for the 21st Century* (US Army War College: Strategic Studies Institute, 1997), 7.

¹⁰ Brian Shanahan, "Joint Expeditionary Forces: A Step Beyond," (Master's thesis, Fort Leavenworth, KS: US Army Command and General Staff College, 1998), 12.

¹¹ Huba Wass de Czege and Antulio Echevarria, "Landpower and Future Strategy: Insights from the Army after Next," *Joint Forces Quarterly* 21 (spring 1999): 63.

¹² William Stearman and Tracy Ralphs, "Medium-weight brigades: Army's part of joint force," *Army Times*, 3 November 1999, 10.

¹³ Keith Garland, *Nonlethal Weapons: Impact and Utility Concerns for Operational Commanders in Future Conflicts* (Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, 1998), 14.

¹⁴ Richard Vandiver, "Reflections on the Signal Corps: The Power of Paradigms in Ages of Uncertainty," (Master's thesis, Fort Leavenworth, KS: US Army Command and General Staff College, 1995), 18.

¹⁵ Ed Offley, "Reshaped Fort Lewis Brigades Will Take Aim at Quick Global Response," *Seattle Post-Intelligencer*, 10 November 1999, 22.

¹⁶ Michael Stewart, "Small View of War: Toward a Broader FM 100-5," (Master's thesis, Fort Leavenworth, KS: US Army Command and General Staff College, 1996), 9.

¹⁷ William Beck, "Tao of War; Balance in the National Military Strategy," (Master's thesis, Fort Leavenworth, KS: US Army Command and General Staff College, 1997), 15.

CHAPTER 3

METHODOLOGY

The process of looking at the US Army as a relevant force for the twenty-first century could take many approaches. In identifying and isolating the issue, the approach for this analysis derived to view the subject modestly from an Army perspective as to how the force may best influence the diplomatic, informational, military, and economic (DIME) aspects of US power. In conducting this DIME analysis, the discussions will take into account the feasibility, acceptability, and suitability (FAS) of associated concepts. And in this effort, the analysis is presented across three levels: strategic, operational, and tactical.

Initially, the analysis will discuss the requirements facing the Army today in relation to the overarching NSS, its supporting NMS, and the associated Joint Strategic Capabilities Plan (JSCP). With the Goldwater-Nichols Act of 1986, the services are tasked to train, equip, and sustain forces for the warfighting CINCs. The analysis will discuss CINC requirements supporting national policies, as reflected in theater engagement plans that in turn influence force development and how the services prepare their forces. In reviewing the Army plans to meet these requirements and those expected in the future, this thesis will analyze Army doctrine relative to force structure. When discussing the functional requirements across three levels, the force structure will be analyzed to see if it is optimized to support the range of missions being levied onto the Army (see figure 3).¹ After evaluating the current force structure relative to its intended purpose, the analysis will discuss forces anticipated to meet future requirements. Next

the analysis proceeds to evaluate methods of force projection to meet global and theater engagement requirements, discussing force alignment, time phased force deployment (TPFD) projections, and lift capabilities.

RANGE OF MILITARY OPERATIONS		
	Military Operations	General US Goals
COMBAT	War	Deterrence & War Strategic Control Global Strategic Posture
	Operations Other Than War	Deterrence Resolve Conflict Border Enforcement, Vetting Strategic Posture, Show of Force Counterterrorism, Disaster Relief Counterinsurgency
	Noncombat	Humanitarian Assistance Disaster Relief Nation Assistance Civil Support, Counterterrorism NGO

Figure 3. Source: JP 3-0, 1-2.

In discussing the relevance of the Army and its associated ramifications (allowing that some question of relevance exists given published sources), one must look at the barriers inhibiting the force from achieving its purpose. This analysis will in turn discuss the disunity of purpose, or “cultural determinism” diffusing Army efforts. Earlier last century, in a similar time with the dawn of modern warfare, junior leaders had to confront tremendous resistance from established practices to address new developments on the

battlefield. History recounts how a young Eisenhower nearly lost his career when presenting a dissenting view on the future of maneuver warfare and how ill-prepared the US Allied Expeditionary Forces were for World War I.² Now, with the dawn of future warfare approaching, Army leadership is once again confronting competing interests as established schools of war reject change in favor of the status quo.³ More recently, General Sullivan as CSA experienced this dissent when he encountered difficulties in modernizing the force.⁴ The barriers impeding the Army will be discussed in detail to attempt a clearer explanation and to suggest what must be done to help the Army.

Shedding some light on this subject, the analysis will then discuss the way ahead. The Army Plan will be discussed and Army posture statements reviewed to evaluate the Army's progress in adapting to the realities of the international security environment. In keeping with the Army adapting to these new realities, the new Army vision will be analyzed, and discussions of doctrine overhaul and force redesign will be presented. The analysis will discuss these changes as they support the joint fight. The thesis ends with a discussion of the way ahead to suggest the Army has identified problems in its current composition and is in fact making progress to correct these shortcomings. Wrapping up the thesis in this manner provides a recommendation for improvement, as the determination of whether something is broken can sometimes be elusive when encountering the "if it ain't broke, don't fix it" mantra.

The analysis will focus on the Army throughout, the Army in its own right, and the Army as part of the larger picture. When necessary it may briefly draw from sister services for emphasis. In developing the hypothesis that the Army today is not a relevant force for the twenty-first century, this thesis will analyze whether the Army is well suited

for its current missions, and whether force readiness and modernization efforts support preparations for the future. The study is not intended to separate reserve capabilities, rather approaching the analysis from the point of one Army--The Army. Additionally, the analysis will avoid discussing special operation forces (SOF) operations, as they have a unique force structure, although the newly developed regional engagement force concept may in time prove useful.

In discussing Army efforts toward change, this analysis will review recent developments in service strategy. In turn, this thesis will present views from contemporary theorists who argue forces embracing change historically were the ones prepared for future conflict. Further study will cover those who have made pointed arguments for the still unfolding future. Discussions will show great leaders stood out for their ability to foresee clearer than their enemies the shaping of the battlefield. Though a current analysis may suggest the Army drifted off course when it traded force development for modernization of existing heavy forces, the service was nonetheless preserving the relative combat power of the world's only superpower.⁵ In contrast, the analysis will show the new CSA and Army Secretary have created a forward-looking Army vision attuned to a superpower entering the twenty-first century, a future with increased complexities of globalization.

Several distinct categories appeared to separate the information gathered while researching for this thesis, with material defined by contribution to: strategic-NSS and NMS; operational-warfighting CINC requirements; doctrinal and tactical requirements; historical- lessons learned, organizational and force composition (Army/joint); and theoretical-RMA/future war arguments. The critical approaches employed in reviewing

the information weighed material relative to its influence on current readiness and/or impact on future conflict. Information was viewed in the context of how it related to the topic, as reported in current news, that there is a readiness problem in the US Army. The author attempted to refrain from displaying any bias in the conduct of this study, though the motivation for conducting this analysis is directly related to personal experiences and heightened awareness on the status of the Army as observed during the last twelve years of service. In the process of growing professionally within the Army and in ascending to field grade, the author has seen a very clear change in career goals of contemporaries and subordinates. The CINCUSJFCOM is right on the mark when he testified before Congress that the personnel exodus could be attributed to folks abandoning a second-rate organization.⁶ Motivations for a career within the Army have fallen dramatically as published reports indicate; given some latitude, this thesis may partly account for this downward trend caused by an Army experiencing disunity of purpose.

In separating the wheat from the chaff, the overriding rationale governing the selection of material was its tangible relevance to Army readiness, both now and for future joint warfighting requirements. The determination as presented is that there is a problem. The recommendations offered will be consistent with achieving near-term fixes in keeping with a long-term vision. The author believes it wise, as many analysts do, to take advantage of the peace dividend resulting from the fall of communism and the end of the Cold War.⁷ In presenting this argument, the thesis will offer that an interim fix to test functional solutions will minimize disruption to the overall force and limit organizational chaos in preparing for the future. This analysis will argue that Army

experimentation with force composition and capabilities today will smooth implementation of a long-term solution to meet projected mission requirements.

In organizing the facts into results and formulating conclusions, the analysis supports new Army initiatives for spreading capabilities across the force.⁸ A recurring theme throughout the volumes of research material, in both official and unofficial sources acknowledges the Army has a decisive edge over potential adversaries that it cannot afford to lose. In discussing the larger implications of relevance, this thesis argues that in preparing for future threats, institutional barriers to change must fall if the Army is to succeed in preparing its force to more capably support the warfighting CINCs, in pursuing the National Command Authority's (NCA's) national security interests.

While in the past a regional disturbance may have been confined to the immediate geographic area, with globalization countries are increasingly affected by neighboring discontent. This thesis will argue that in the process of fulfilling force requirements under national and theater engagement policies, the Army will need to be more adept. The absence of closed borders today magnifies problems once contained within a state's boundaries as they are more easily spread to neighboring countries. Internal religious strife, ethnic disputes, economic trouble, and social discontent can quickly spread throughout a region, as the Balkan conflicts have shown. In viewing the larger picture of global stability, crucial to economic prosperity at home, this analysis will suggest that the US government has demonstrated a heightened reliance in the US military to promote democratization and nationbuilding worldwide. Accordingly, this thesis will argue the Army will have an increasingly important role in keeping with future national objectives and the globalization of economics.

Interestingly, regional security interests are increasing as the international community addresses its ability to respond or deter potential crises. The European Union (EU) for example recently decided to form a 60,000 strong force in an effort to assist in reestablishing peace and tranquility in Europe.⁹ While encouraging greater multinational participation, the US must be prepared to respond unilaterally when national interests demand action. In discussing these capabilities, the relevance of Army efforts, and offering a way ahead, the author intends in the conduct of this study to leverage points made by respected strategists in developing the discussion on how the force may better support overarching national strategies.

¹ Joint Chiefs of Staff, Joint Pub 3-0, *Doctrine for Joint Operations* (Washington, DC: JSC, 1995), 1-2.

² "Leaders of Character" *Leadership Book of Reading* (Fort Leavenworth, KS: Directorate for Leadership, 1999), Lesson 3.

³ Stewart, 19.

⁴ Romjue, 35.

⁵ John Barry and Evan Thomas, "Not Your Father's Army," *Newsweek*, 22 November 1999, 48.

⁶ Congress, House Committee on Armed Services, Military Readiness: Hearing before the Committee on Armed Services, 106th Cong., 1st sess., 22 March 1999; available from <http://www.house.gov/hasc/testimony/106thcongress/99-03-04gehman>; Internet; accessed on 10 February 2000.

⁷ William Cohen, remarks as prepared by SECDEF for CINCPAC Change of Command, Camp Smith, HI, 20 February 1999.

⁸ Caldera, comments at the annual AUSA Convention when unveiling the new Army Vision, Washington, DC, 12 October 1999.

⁹ Sean Naylor, "EU Forms 60,000 Strong Force," *Newsweek*, 10 January 2000.

CHAPTER 4

ANALYSIS

As architects of our own revolution, we have to reach out to the future with open eyes and open minds--daring to experiment and ready to switch courses based on what we discover.¹

Secretary of Defense Cohen, *Quadrennial Defense Review*

This thesis is based on the argument that the Army needs to find a practical strategy for the future and tailor its force structure and force development process to better support national objectives and the warfighting CINCs who translate these national priorities into theater operational objectives.² The Army enters the equation at this point as do the other services to support their components in executing the supporting tactical tasks.³ The purpose of this analysis is to discuss the role of the service; the impact of strategic, operational, and tactical requirements on the force; and the leverage technology can safely offer in developing an agile and responsive Army. The bottom line up front is the nation needs a capable Army with a relevant strategy for the future to meet national security objectives.

Theorists suggest the Army is applying advances in technology to an antiquated vision of warfare (see figure 4).⁴ Though convenient to fight scenarios based on previous battles when attempting to refine tactics, techniques, and procedures (TTP), the Army would be better served in focusing its forces for the future. With the proper focus, the US Army could revolutionize its doctrine and supporting force structure to maximize the benefits associated with the ongoing RMA.

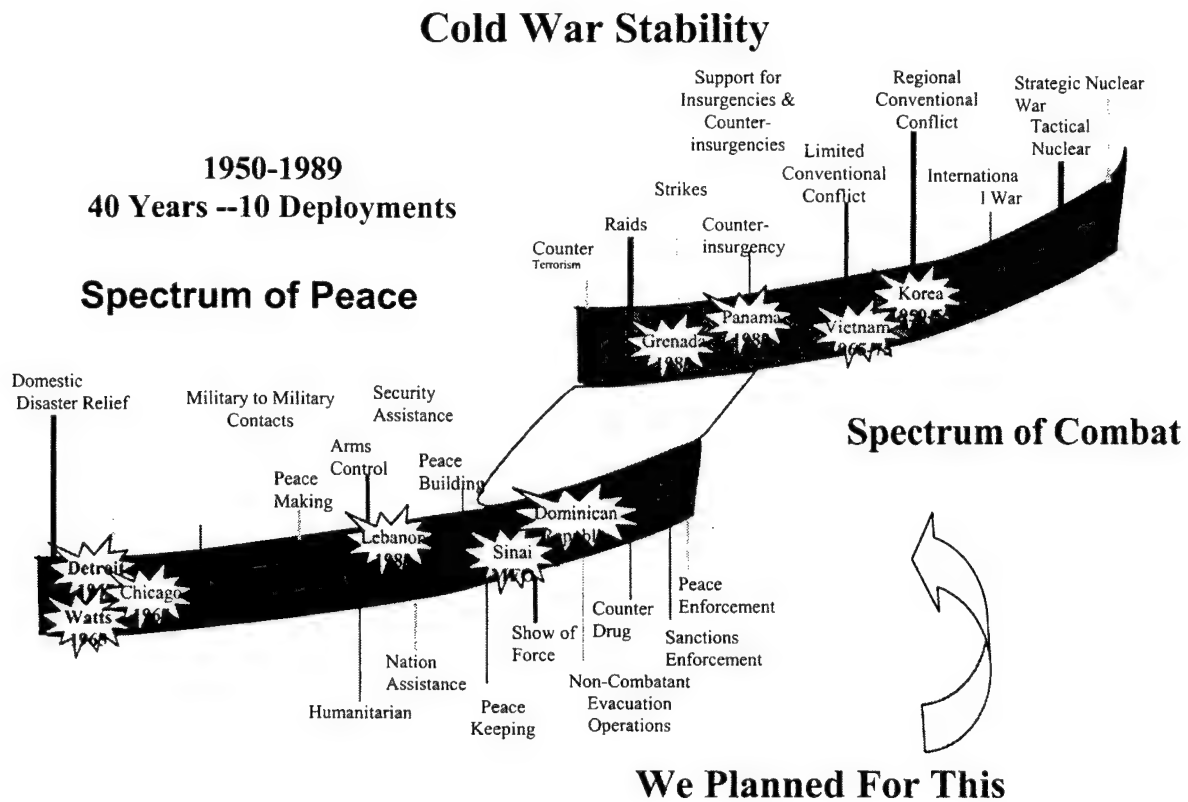


Figure 4. Source: *Army Vision 2010*, 5.

The multidimensional threat forces face today and anticipate facing in the future demands a flexible and agile military capable of quickly and decisively responding to a range of threats previously unimagined (figure 5).

Post Cold War Reality

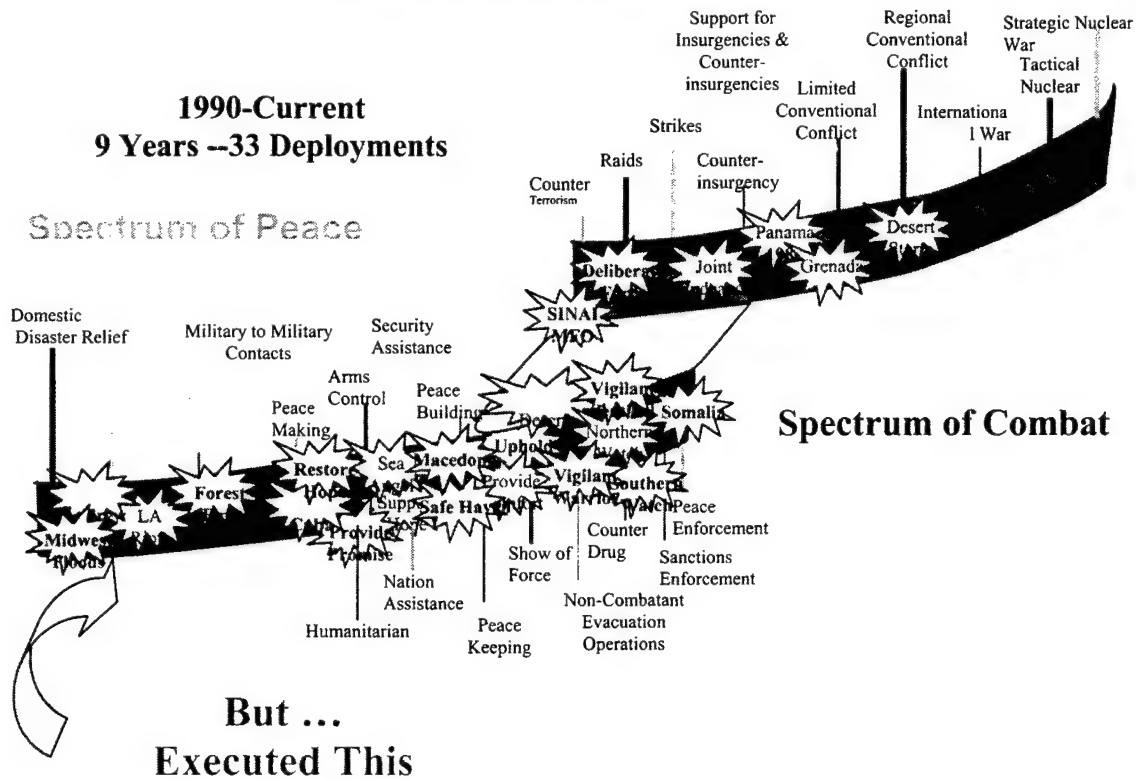


Figure 5. Source: *Army Vision 2010*, 5.

Relevance

Former Chairman of the Joint Chiefs of Staff (CJCS) General Shalikashvili noted in the 1997 NMS that the military has an important role in supporting the NSS imperative of engagement. He believed using the military in appropriate ways to help shape the international environment could facilitate a more peaceful and stable world.⁵ Noting the primacy of US armed forces to deter and defeat threats to the US and its interests, the chairman acknowledged the military must be prepared to respond to diverse missions while emphasizing its core competency of prosecuting war. He further stated that the consensus of the joint chiefs was that the NMS strategy of shaping, responding, and

preparing now for the new era would in their best judgment protect the US and like-minded nations.⁶ In calling for the US to support global engagement he recommended the nation position substantial forces overseas and readily exercise deployments and coalition exercises, to help shape the international environment by promoting stability and the peaceful resolution of problems, deterring aggression and conflict (figure 6).⁷ Peacetime military engagement further serves to demonstrate US resolve to allies and adversaries alike, improving interoperability, conveying democratic ideals, deterring aggression, and helping to relieve sources of instability before they catch fire.⁸

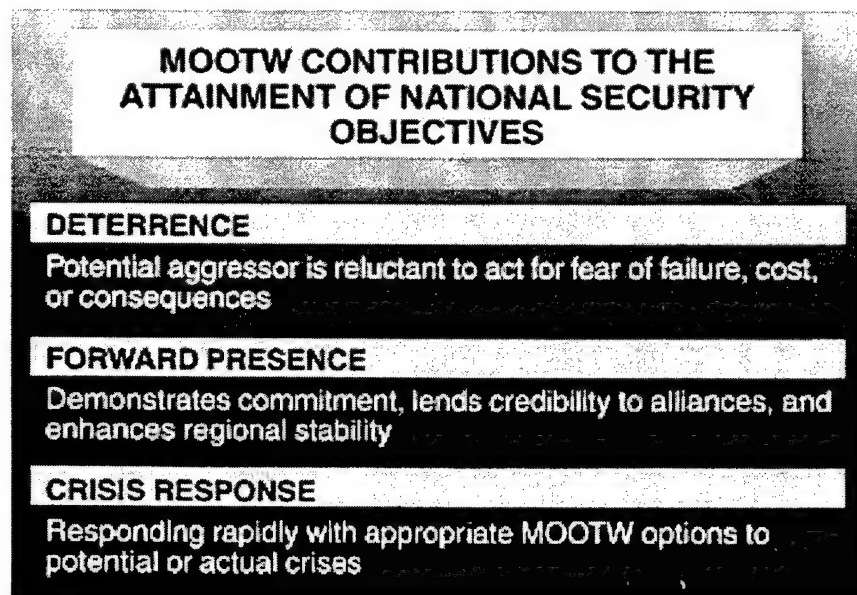


Figure 6. Source: *JP 3-07*, 1-3.

Recognizing the domestic importance of security, US national security recently started emphasizing homeland defense efforts. In turn, USJFCOM and its Army component FORSCOM have accepted primary roles in protecting US interests.⁹ Charged

with supporting the defense of the US homeland against emerging threats of terrorism and weapons of mass destruction (WMD), the Army has come to realize not all of its critical missions are related to traditional warfighting scenarios or conducted overseas. Consequently, over the past few years soldiers have increasingly supported disaster relief operations and provided domestic support to civil authorities during natural disasters, and in support of law enforcement activities. Additionally, with Secretary Caldera as the executive agent for the DoD Domestic Preparedness Program, the Army has the lead for this initiative in countering threats from proliferation of WMD to attacks on US information infrastructure. The significance of this mission for the force is reflected in the annual Army Posture Statement, prepared to update congress on service roles and programs.¹⁰ The program focuses joint and interagency efforts in preparing military and civilian first responders primarily for incidents involving WMD. The Army notes the program had trained nearly 10,000 first-responder trainers in 32 cities by the end of Fiscal Year (FY) 1998, and expects to reach over 120 cities by FY 2002.

Historical

Concepts of warfare have changed over the years in response to technological advances, with the twentieth century seeing several developments in weapons and communications that impacted warfare.¹¹ Introduction of the tank, armored personnel carrier, helicopter, jet airplanes, riverine operations, and mobile radios all gave the US considerable advantages over the Vietminh and Vietcong during the US conflict in Vietnam. They in turn learned to counter this superiority by denying the US large force engagements, using booby traps, false radio and pyrotechnic signals, and sabotaging

landing zones to disrupt offensive operations. The North Vietnamese were able to overcome the tremendous advantages of US forces over time as they more capably integrated adaptive techniques into their battlefield tactics.¹² History has shown superiority in weapons and tactics to be ready force multipliers, though these advantages can be fleeting as they are overcome by an enemy who learns to mitigate these strengths.¹³

The interwar period between the last two world wars greatly resembles the current international environment. Both developed and developing countries are focusing efforts on domestic priorities of economic growth and national prosperity. Though peace following World War I separated opposing forces and disarmed the combatants, the antagonists returned years later with similar ambitions. Today, while there are no aggressors with such territorial ambitions, regional threats remain.

The end of the Cold War ironically caused a significant realignment of influence, dissolving former alliances and in turn freeing long suppressed hatred among rival ethnic groups. The resultant unrest has brought many nations to civil war as seen in Europe, Africa, and Asia. While reducing defense expenditures, traditional western allies have increased defense agreements to leverage peace dividends and improve economic development at home.¹⁴ Many former Soviet allies are seeking western alignment to spur economic and social development with neighbors, reestablishing ties to improve regional economic development and spur internal restructuring.¹⁵ During the course of all these developments, historians and diplomats alike warn of entangling alliances similar to those drawing Europe into World War I.¹⁶

How former rivals have responded during peacetime directly impacted their preparedness for conflict and success in war that was to come. Each side from World War I drew different conclusions from the devastating and costly war, with the West largely believing in the benefits of prepared defenses and the East in maneuver and concentration of forces.¹⁷ While the western allies had used technology to mitigate German capabilities, the Germans in turn had used tactics to counter the allied defenses.¹⁸ Neither approach had achieved a decisive victory but nonetheless each caused the former adversaries to draw different conclusions.

The French emerged from World War I with the strongest force on the continent, and secure in their military dominance. Bowing to tremendous national pressure to realize the peace dividend, France promptly reduced military modernization and maneuvers in favor of creating the infallible Maginot Line and its concentration on defensive tactics.¹⁹ The French perfected tactics for fighting their last war, focusing on impregnable defenses, and intending to destroy future enemies along their frontier. They incorrectly assumed future adversaries would fight according to the same plan. Though France still maintained the most capable force on the continent at the dawn of World War II, their focus on defensive warfare paralyzed their ability to squash the looming threat when they were more than capable of stopping the Nazi war machine and preserving peace.

The Germans on the other hand drew more valuable conclusions from their defeat in World War I. They recognized the limitations of trench warfare and were committed to avoiding the devastating effects of frontal assaults. Accordingly, they placed more emphasis on developing the capabilities to penetrate and envelop enemy forces,

implementing on the eve of hostilities Guderian's blitzkrieg tactics to deal the shock effect blows of maneuver warfare.²⁰ In preparing for war, the German military was forced to adapt civilian equipment for military use to overcome armaments restrictions imposed by the Treaty of Versailles. This necessity for military innovation would serve German forces well and give them great flexibility later on the battlefield.

Likewise, the US drew valuable lessons from its participation in wars of the twentieth century. Though generally quick to demobilize and return to domestic priorities to enjoy the peace dividend, the US came to realize it could not count on mobilization alone.²¹ The looming Soviet threat fostered the largest arms race in history and ultimately bankrupted the Soviet Union, unleashing the bonds of communism and precipitating the collapse of the Warsaw Pact.²² In the aftermath of the Cold War, the US adopted a forward-looking national security strategy of engagement attuned to the realities of this era. Accordingly, the NCA intends to leverage international arrangements and the benefits of globalization to lay a foundation for security and prosperity in the twenty-first century.²³ Building upon mutual defense agreements over several decades that countered Soviet aggression and mitigated communist domination of the hemispheres, today's forces in a multipolar world must take a similar long-term approach to meet national objectives of enhancing security, bolstering America's economic prosperity and promoting democracy abroad.

Though evidence of former antagonistic behavior remains and resurfaces occasionally as in the Balkans and former Soviet republics, the large-scale threat to world peace has diminished. With America standing as the sole superpower, many developing countries are courting the US for diplomatic and economic aid in improving their

international standing and national welfare. The US though has no monopoly on technologies and strategies and must remain vigilant to the multitude of threats lest it suffer a devastating attack.²⁴ Regional economic and security agreements will help to improve regional autonomy and counter the growing rise of transnational threats. Together these combined efforts will achieve greater economic prosperity and increase global stability better than US efforts alone.

While well suited for fighting a major ground war, the Army has instead been committed without necessary restructuring to nontraditional missions where it has had to create adhoc units to meet mission requirements (see figure 7).²⁵ The experiences of Somalia and the Balkans have demonstrated the cumbersome and poorly structured Army is ill suited for these missions. Unfortunately, these types of missions are exactly what the Army will face as the US continues to perform peace operations supporting the engagement theme of the NSS. Michael Vickers, a prominent military advisor to a Washington think tank argues, "the Army has become too bulky to be strategically relevant."²⁶

Reflecting a growing skepticism of military involvement, the American public has indicated its preference for the US to reduce its unilateral military operations overseas and support alliances in playing a greater role. By nearly four to one, the US public believes the UN and not the US should have the predominant role in promoting democracy and deterring aggression.²⁷ Durch captures this sentiment in *UN Peacekeeping, American Policy, and the Uncivil Wars of the 1990s*, discussing America's role in United Nations operations and lessons learned from the more "muscular efforts" since the Gulf War.²⁸ He notes that under Presidential Decision

Directive (PDD) 13 the US sought to devise a plan for the long-term strengthening of UN peacekeeping activities and US capacity to participate.²⁹ In the end, this effort achieved limited success due to a lack of congressional support. Later, under PDD 25 the US prepared to make available the full spectrum of military capabilities to multinational peace operations; the US accepted that its contributions, including combat forces could be subject to the operational control of UN commanders; and the US specified Departments of State and Defense would share responsibility for increased financing of UN operations. Unfortunately, the US has not fully implemented PDD 25 and participates on a case-by-case basis due to lack of support by the DoD.³⁰ After all is said and done, the fact is the US has been lukewarm in supporting an expanding UN role.

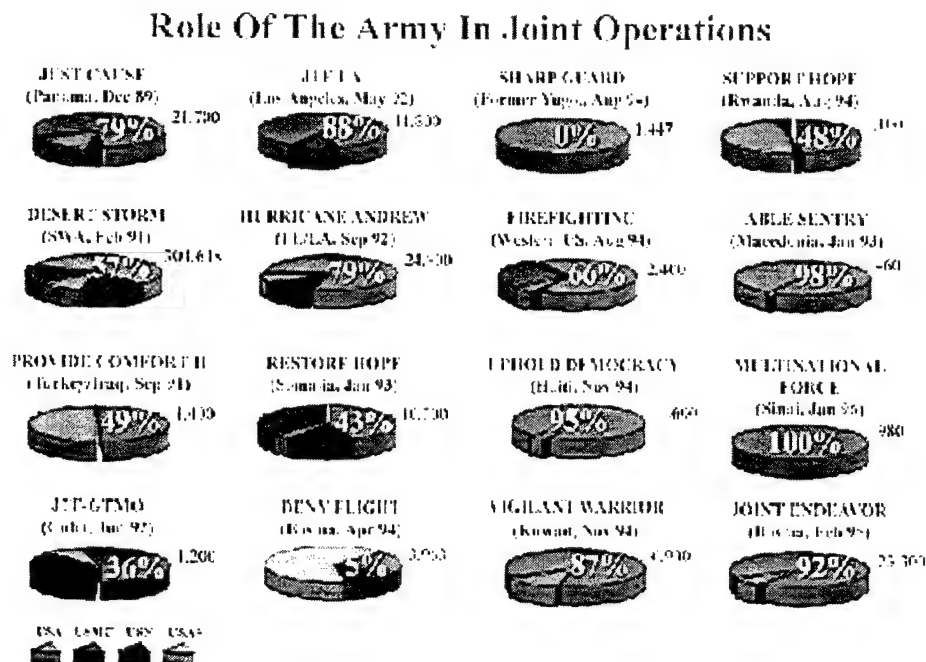


Figure 7. Source: *Army Vision 2010*, 6.

According to defense expert John Hillen, the US lesson learned from Kosovo is the Army needs to develop a medium-weight force that can rapidly deploy.³¹ An earlier effort known as the strike force was envisioned to be such a force, providing increased lethality and survivability currently lacking in the Army's light forces, while improving the deployability, agility, and sustainability of its heavy forces. Unfortunately, the effort never proceeded past organizational analysis according to Brigadier General Dubik.³² Critics complain that the Army should make concerted efforts to take advantage of the relative calm in the world and reintroduce force development testing with brigades similar to the focus of the 9th Motorized Division concept.³³ The US Army needs to learn a lesson from history and realize that meeting the diverse requirements today requires greater flexibility than the Army's divisions organized for a war fifty years past can offer. General Abrams, current Training and Doctrine (TRADOC) Commander, acknowledges Army efforts are "all about innovation."³⁴ And Major General Zanini who leads TRADOC's combat development efforts concedes the aborted strike force effort was an initiative "to ensure our Army remains relevant in the 21st century."³⁵

Strategic

General Gordon Sullivan, former Army Chief of Staff, has noted that the Cold War was America's third most costly war, with 100,000 American giving their lives to contain communism and promote democracy.³⁶ From the Berlin Blockade in 1948 and the crisis in Greece, to the Korean War in the early 1950s, the US military found itself recovering from a world war, engaged in lesser military actions. Continuing through the Berlin and Cuban Missile Crises in the 1960s and former Indochina into the 1970s, the

US increasingly committed military forces to demonstrate national resolve in this campaign. Entering the 1980s the US found itself further involved in the western hemisphere to stem aggression, as well as in Afghanistan to counter the last gasp of Soviet expansion. As the US struggled at all levels of power: political, economic, military, and ideological on behalf of the free world against the communist hegemon, military presence, predominantly land power, was the ever present symbol of US strength and democracy's resolve to defeat tyranny. General Sullivan argues it was precisely America's preparedness that allowed the US to emerge victorious from the Cold War.³⁷

The strategic importance of the US Army today is evident at the highest levels of the nation's national security apparatus. In requesting increased defense spending, the executive branch called the military the backbone of US national security strategy.³⁸ When further stipulating that American forces must be ready to respond rapidly to the full spectrum of crises from major theater war to small-scale contingencies and counter-terrorism operations, the White House identified readiness as the top defense priority. Singling out modernization and recruiting, retention and training programs for improvement, the executive branch intends for the US military to remain the best equipped in the world. In calling for a \$4 billion increase in the \$53 billion weapon systems modernization funding to update ground forces, the White House targeted specific areas for improvement including battlefield information dissemination, and updates to the Abrams tank, Bradley fighting vehicle, and Apache Longbow helicopter. In identifying individual Army programs for improvement, the executive branch is reflecting concerns of senior military leaders in the capability of the Army to support the warfighting CINCs.³⁹

Former CJCS, General Shalikashvili foresaw the importance of creating this synergy from among separate service efforts when he created the Joint Vision 2010 (JV 2010) concept to improve joint operations and warfighting.⁴⁰ This effort was intended to assist the services in developing supporting visions to guide their force development toward joint warfare. According to the 1997 NMS, the JV 2010 vision of future capabilities should guide US warfighting requirements and procurement and focus technological development. The concept's key enablers of information superiority and technology are expected to support the new operational concepts of dominant maneuver, precision engagement, focused logistics, and full-dimensional protection.⁴¹ According to JV 2010, making these concepts a reality will allow the US to execute decisive operations across the full spectrum of conflict, achieving "full spectrum dominance."

Vickers suggests the Army has failed to adjust force structure and tactics in response to advances in warfare.⁴² He believes a lot of what the heavy divisions were developed to address is now being performed from the air. While not a Halt Phase advocate promoting the unilateral effects of airpower, Vickers believes heavy forces can be reduced relative to the capabilities now provided by air forces.⁴³ The corresponding reduction in heavy forces will allow the Army to develop a force structure more appropriate to current and future requirements. Combat veteran turned defense analyst, John Hillen says the Army will not be invited to future conflicts in force unless it can rapidly deploy a lethal, mobile, and survivable force.⁴⁴

This relevant future force may have just been unveiled in the new *Army Vision*. Complemented by Army Secretary Caldera, CSA General Shinseki announced they were "capitalizing on lessons learned through many deployments and the Advanced

Warfighting Experiment to create a highly adaptive strategy to man, modernize and manage America's vital land-power."⁴⁵ According to Secretary Caldera, this improved capability will give the Army important flexibility in supporting the full range of NCA options. "It will provide the NCA an enhanced ability to respond rapidly with land forces to crises and small-scale contingency operations (SSCOs), to engage to deter conflict, to fight and win decisively, and to maintain peace."⁴⁶

Operational

Translating national security policy down into operational strategies, the warfighting CINCs develop corresponding theater engagement plans against which forces are apportioned (see figure 8).⁴⁷ Typical among these strategies is that of Central Command. In developing his theater strategy for supporting the NSS, General Zinni, Commander in Chief US Central Command (CINCCENT), noted the considerable efforts among potential threats within the central region toward developing nonconventional and asymmetrical capabilities.⁴⁸ He acknowledged the huge challenge of promoting stability in the region, while admitting success in achieving the broader strategic aims of engagement and enlargement. General Zinni explained that in shaping the central region for the twenty-first century his forces must coordinate closely with US, coalition, and nongovernmental elements to enhance the synergy and efficiency of efforts. Toward this goal CINCCENT affirms forward presence must be weighed against force projection constraints and warfighting readiness against peacetime engagement. He notes these considerations require constant adjustments to meet the dynamic challenges in the region,

and believes developing and maintaining the forces and infrastructure to respond to the range of threats is critical for security in the Gulf.

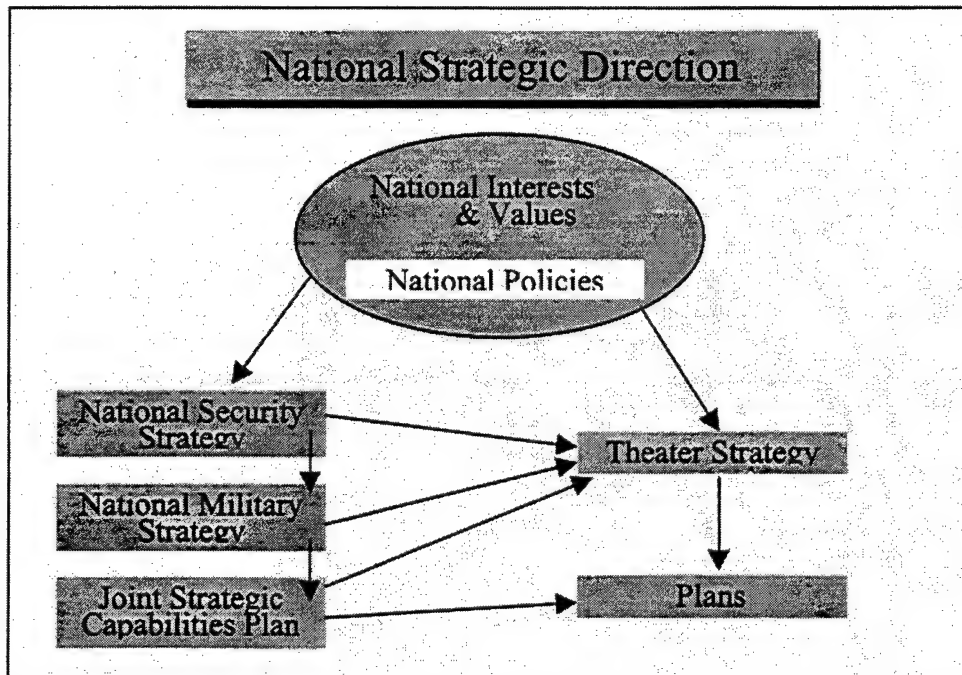


Figure 8. Source: JP 3-0, 1-5.

Similar to Central Command's theater strategy, General Clark, Commander in Chief US European Command (CINCEUR), identifies his approach as a strategy of readiness and engagement, also pursued in close cooperation with friends and allies.⁴⁹ Citing readiness as primary, CINCEUR states the forces' core competence is the ability to apply decisive military power quickly to deter or defeat aggression and achieve national security objectives. In strengthening NATO, he intends to lead the evolution of capabilities, providing the US share of forces through a combination of forward-based and deploying forces. General Clark says the European Command (EUCOM) plans are dependent on maintaining a network of bases to support power projection of forces. To

achieve stated theater objectives CINCEUR admits further dependence on the service components, noting US forces must permit rapid response to regional contingencies, maintain supporting infrastructure for reinforcement and power projection, and support engagement. In stressing engagement as key to maintaining regional peace and stability in Europe, CINCEUR acknowledges crisis response requires an enormous force projection capability to move his heavy forces.

As part of the greater effort to improve joint warfighting capabilities and provide the theater CINCs more capable forces, US Joint Forces Command (USJFCOM) was activated this past year. In presiding over the ceremony, Secretary Cohen noted the command will harness the strengths of the individual services into one coherent joint fighting force.⁵⁰ For its part, USJFCOM identifies its role as the trainer, integrator, and provider of forces for the warfighting CINCs. In performing its role, Admiral Gehman, CINCUSJFCOM, notes achieving joint integration, the synergistic blending of technology, systems, and doctrine from the different services as critical to improving warfighting capabilities.⁵¹

As the joint forces provider USJFCOM balances between maintaining readiness to support near-term requirements of shaping and responding to worldwide crises, and the long-term requirements of preparing for future national security challenges. Consequently, this drives the requirement to be able to transition from a posture of global engagement to fighting major theater wars, while striving to efficiently use resources. Also maintaining responsibility for the Atlantic area of responsibility (AOR), USJFCOM shapes the security environment through development and execution of a comprehensive theater engagement plan (TEP). Charged with command of most continental US

(CONUS)-based forces, USJFCOM affirms its responsibility for defense of the US, including disaster relief and assistance for civil disturbances.

A review of the US Pacific Command (USPACOM) theater strategy wraps up this discussion on operational relevance, noting the region demands considerable attention as it encompasses the world's six largest militaries.⁵² Accordingly, USPACOM strategy for ensuring regional security is based on maintaining credible, combat capable forces; forward stationing of critical capabilities; positive security relationships in the region; and measured responses to regional events. In deterring aggression, Admiral Blair, Commander in Chief US Pacific Command (CINCPAC), maintains a credible crisis response capability characterized by agile, ably controlled forces and by promoting confidence building in the region. To prepare for the undeterred, CINCPAC maintains a balance of decisive and ready forces forward deployed, forward based, and CONUS based. He noted that nations continue to measure American troop strength as a gauge of US commitment.⁵³

Wass De Czege and Echevarria note that strategy, operational art, and tactics entail asymmetries, whose leveraging will provide crucial advantages.⁵⁴ Properly coordinated developments in strategy and tactics with a corresponding force development will establish the appropriate military to face future threats. On the other hand, a skewed emphasis in land, air, sea, or space forces alone may result in asymmetries that invite exploitation. Accordingly, leadership in the fluid geostrategic environment of the future will demand a periodic display of US and allied resolve. The JEFs of the future will convincingly demonstrate joint capabilities and will become the force of choice in supporting US engagement policies.

Experiences have shown interagency cooperation with the US military is often a hit-or-miss proposition. Rival agencies tend to have their own agendas and tend to reluctantly work together. To overcome this distrust the military can leverage the adaptive joint force package first proposed by Admiral Miller in 1992.⁵⁵ The JEF concept adds the civil military operations center (CMOC) to integrate organizations increasingly involved in Stability and Support Operations (SASO).⁵⁶ As agencies increasingly see the US armed forces involved in peacetime engagement they more readily associate military presence with a concerted US effort. Establishing agreements and conducting periodic exercises and deployments with various governmental and non-governmental agencies (along the lines that the Federal Emergency Management Agency (FEMA) is supported in national emergencies) would capitalize on organizational strengths and provide the nation its best interagency task force to address the full range of associated NSS requirements.

Recognizing the Army's part of the larger picture, CSA Shinseki spoke to the Command and General Staff College class this past October and reiterated the Army needed to develop its vision, that it needed to develop a strategy for technology, modernization, and manning.⁵⁷ He offered the Army needed to develop a medium force, "persuasive in peace, invincible in war." The unexpected emphasis of Shinseki makes it appear the Army will expend tremendous effort toward becoming a relevant force in twenty-first-century warfare. If the heavy emphasis of the Army Secretariat is any indication of service commitment, the Army could potentially become the cornerstone of the JEF.

The latest Army emphasis in modernization, the medium-weight force, is an innovative approach while in turn facing the realities of budgetary constraints and emerging threats to US national security. However, it can do better as will be argued later in the analysis. A *Washington Post* expose notes the Army could finance the transformation in excess of \$50 billion without additional funds if it cuts Cold War weapons programs.⁵⁸ The Army's declared intent meanwhile is to enhance the NCA's ability to respond rapidly to crises and contingencies requiring land forces. This revamped Army will better support the operational objectives of the warfighting CINCs in support of national policies. The Army sees itself as key to deterring conflict, maintaining peace, and decisively fighting and winning conflicts with its enhanced lethality, deployability, agility, versatility, survivability, and sustainability.⁵⁹

Tactical

The end of the Cold War and subsequent downsizing of the US military caused the Army to take a hard look at weapons development and associated tactics for future war. Lacking a clear threat to focus doctrinal and systems development, TRADOC formed a network of battle labs in 1992 to develop and test concepts, associated equipment, and training methods with organizational design.⁶⁰ The battle labs were consequently oriented toward each of five areas: lethality and survivability, dismounted and mounted battlespace, depth and simultaneous attack, battle command, and combat service support. In looking to the future, the Army created the Army Modernization Plan in May 1994 and the complementary Force XXI process to guide efforts. The Army realized the future force would be more dependent on power projection and sustainment

as a result of becoming largely CONUS based. Complicating the equation was the added requirement to rapidly deploy US forces in support of two major regional contingencies (MRC). In identifying the two MRC concept to guide US force development efforts, the NMS had placed further demands on rapid movement of units and equipment.

In preparing for future conflict the Army is placing tremendous emphasis on technological overmatch to compensate for reduced force structure. Consequently, tacticians argue the Army relies too much on technology at the expense of the human dimension of war, the element that has traditionally defined the difference between success and failure in conflict.⁶¹ Futurists offer positions on appropriate mixes of technology to the operational art of war. Others suggest the fog of war espoused by Clausewitz has been overcome by digitization of the battlespace.⁶² Tacticians argue that an abrupt denial of technology critical to an overreliant force could quickly and perhaps irrevocably disrupt operations and overwhelm the ill-prepared force. For its part, the Army needs to develop an adaptable quality force that will meet CINC demands. Even better, it should strive to create a force that will revolutionize warfare and cause a corresponding adjustment to national security strategies.

Critics, such as the Defense Budget Project's Andrew Krepinevich and Johns Hopkins Professor Andrew Bacevich, contend US performance during Desert Storm has taught potential threats to focus their efforts in ways to mitigate US conventional dominance.⁶³ Bacevich argues the US military still reels from humiliation in Vietnam and has deliberately dragged its feet in preparing for the inevitability of unconventional warfare reborn. These critics point to embarrassments costing American lives in Lebanon and Somalia as examples for future adversaries to target US forces. These

faulty applications of military power have highlighted American vulnerabilities and lack of appreciation for the unconventional environment. Perhaps most significantly, adversaries realize the leverage domestic concerns hold over military operations and are increasingly adept at crossing the pain threshold to force premature curtailment of US involvement. Krepinevich warns the US to be wary of confronting "streetfighter states" without adjusting both US tolerance for casualties and improving military capabilities.⁶⁴ Adversaries have come to understand US social weaknesses are a significant counter to traditional force confrontation and will be increasingly emboldened to disregard US interests in pursuing their goals.

Acknowledging the growing importance of homeland defense, General Schwartz, Commanding General Forces Command (FORSCOM) asserted that not all of the US Army's important missions are related to traditional warfighting scenarios or conducted overseas. Soldiers are increasingly finding themselves supporting disaster relief operations and providing domestic support to civil authorities, during natural disasters and in support of civil law enforcement agencies. Additionally, FORSCOM is charged with supporting the defense of the US homeland against emerging threats of terrorism and WMD. General Schwartz affirms the reserve components are leading this effort with their special qualities, capabilities, and established relationships within communities and with local and state officials. He acknowledges increased integration of the active and reserve components will be critical to improving US defense posture.

A senior wargaming strategist who assists Army force development efforts, Ambassador Armitage says Chechnya exemplifies future conflict. In briefing the Army War College in 1998 he explained how demographics is increasingly bringing warfare to

urban areas.⁶⁵ Urban warfare demands lighter, lethal, and agile forces with small logistic footprints as the Chechen rebels have shown through their humiliating defeats of larger Russian forces. Russian forces are losing their most advanced weaponry to innovative asymmetric fighting techniques, as recent losses of T-90 tanks show. Consequently, Ambassador Armitage argues the US Army no longer needs the heavy Crusader artillery system nor the armored Comanche scout helicopter nor the vast fleet of Abrams tanks. He noted the end of the Cold War was the end of their wholesale usefulness and argues the Army would be better served by recapitalizing these systems to fund new modernization efforts. The Army needs to heed the call for a balanced force to fight future war while being equally adept at executing SSCOs.

Force Structure

Successes are largely due to being shackled neither by convention nor by respect for precedent.⁶⁶

Mazaar, Chaos Theory and Military Strategy

The NSS imperative of engagement stresses the importance of the US remaining involved internationally and of retaining leadership in multinational defense agreements. The AAN effort begun in 1996 supports this imperative, and is intended to evaluate future strategic requirements and the Army's ability to meet them. Contrary to the Halt Phase Strategy espoused by airpower advocates who claim the Air Force can bear the brunt of deterring and fighting the nation's wars, AAN efforts to date emphasize the vital role of landpower in maintaining peace and resolving war.

When former CJCS General Shalikashvili unveiled JV 2010 in 1996 and noted that fighting as a joint team would be even more imperative in the future, he gave a

glimpse of requirements seen today. The JV 2010 concept overcomes an earlier attempt to address joint warfare, known as the adaptive joint force package (AJFP) that had failed due to lack of support. Largely, this failure was due to a shortcoming in Admiral Miller's original AJFP concept and its restriction to military forces alone.⁶⁷ The realities of today show the limitations of this approach left unaltered, as the military represents only a portion of the US response to peace operations. Current affairs and anticipated future developments require an integrated approach to mesh governmental organizations (GOs) and nongovernmental organizations (NGOs) together and meet NSS objectives in the face of limited resources.

In addressing the changing nature of warfare, Admiral Blair, CINCUSPACOM acknowledges the transformation as laid out in JV 2010 is far different from today's forces.⁶⁸ Advances in exploding information technology, new weapon effects, and advances in stealth technology will all combine to produce a more complex and lethal battlefield. He calls on the US military to concentrate effects and speed up the battlefield tempo to win more quickly and decisively. To accomplish this Admiral Blair calls for investing in personnel and technologies. Most importantly, he says the US must boldly experiment to integrate people and technology into new operational concepts. In this effort he acknowledged Pacific Command's lead in developing a complementary experiment for JFCOM called Extending the Littoral Battlefield (ELB). The ELB Advanced Technology Demonstration (ACTD) is expected to give JTF commanders the ability to use their forces across traditional service lines for much greater warfighting effectiveness.

Through multiple initiatives at improving joint warfare, the services are demonstrating their increasing commitment to the joint fight. Consequently, they are improving support to the combatant commands in implementing the NMS and the Unified Action Plan. The Army for its part is now developing and training the force to meet warfighting CINCs requirements. According to Lieutenant General Rigby, Deputy TRADOC Commander, the warfighting CINCs are telling the Army they need a capable force with excellent communications capabilities they can commit in 96 hours.⁶⁹ Striving to improve its ability to support the joint warfighter, the Army began pursuing the strike force concept two years ago as it believed the force's rapid deployability and streamlined command and control system would provide unparalleled capabilities to the CINCs. Highlighting the tremendous demands facing the force, an associated news article indicated the Army last Christmas had elements from three corps and six division headquarters deployed in support of the CINCs.⁷⁰ In response, the Army expected the strike force would be a welcome answer to CINCs who were drawing personnel from disparate major command (MACOM) staffs to support contingencies. To support the warfighter, initial Army plans earmarked one strike force package for Alaska to support Pacific requirements, with a sister strike force in Italy to support European forces.

Current

The Army leadership has learned from the countless deployments over the last few years that the current Army force structure does not readily support the preponderance of missions being assigned.⁷¹ The Army has not been able to share the mission requirements among the total force and has accordingly overwhelmed those

recurrent forces shouldering the deployment burden (see figure 9).⁷² Deputy Assistant Secretary of Defense for Reserve Affairs Charles Cragin further clarified the Army's over reliance on deploying units when he spoke to CGSC students this past December.⁷³ He noted that over the last year reserves had provided over 35,000 soldiers (equivalent man-hours) that would have cost the active force more than two divisions. He noted the Army has realized it cannot deploy without its reserve component, and is pleased to see increased efforts to integrate reserve component (RC) and active component (AC) forces. The formation of the two integrated divisions and active/reserve unit alignments improve burden sharing and increase readiness as the one team, one fight, one future concept matures in the Army. When General Shinseki spoke to this year's CGSC class he indicated the high OPTEMPO was a primary factor affecting manning levels. In response, Shinseki believes one of the benefits with fielding sufficient medium-weight forces will be a reduced OPTEMPO as the requirements are better spread throughout the force.⁷⁴

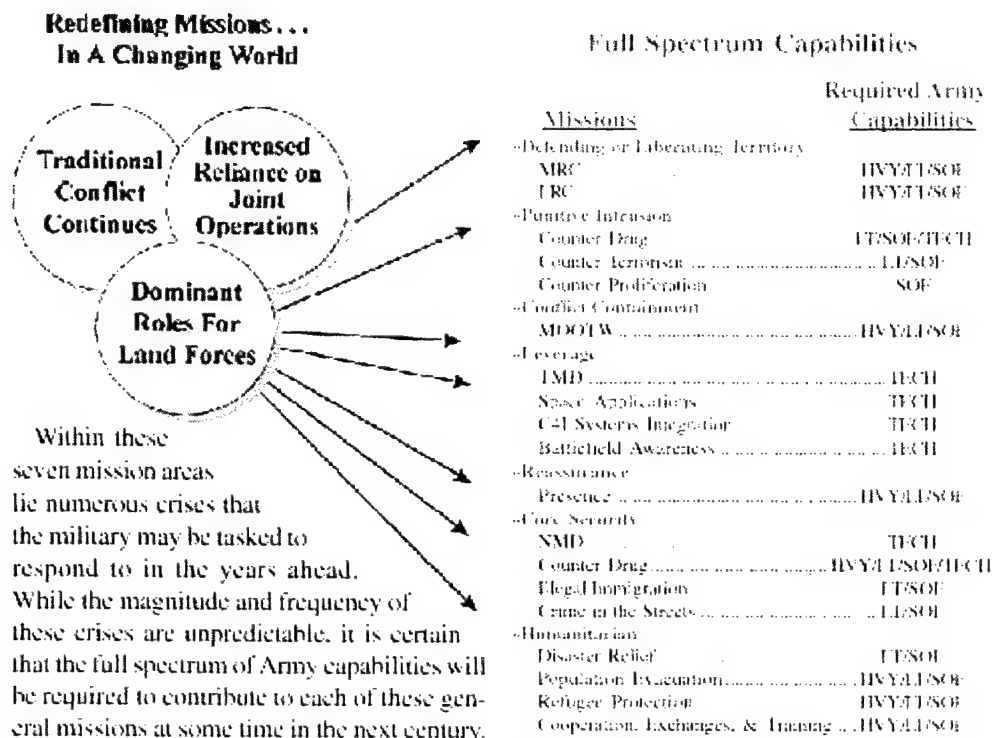


Figure 9. Source: *Army Vision 2010*, 8.

General Abrams, Commander of TRADOC, in testimony before the House Armed Services Committee (HASC) on readiness in 1999 stated that his two major missions were in preparing the Army for war today and for the future. He noted that TRADOC was formed in 1973 to improve the health of the post-Vietnam era Army, and that it has had tremendous success. TRADOC continues to aid the Army by improving doctrine, developing tough and realistic training, developing modern equipment, and introducing effective organizational design. Affirming current force structure is organized around the Army of Excellence (AOE) style division, General Abrams recognized the end of the Cold War brought about a need for the Army to downsize and

reshape itself to better utilize assets (see figure 10).⁷⁵ The challenge he says is in balancing near-term readiness with long-term modernization.⁷⁶

Current Force Structure (division oriented)

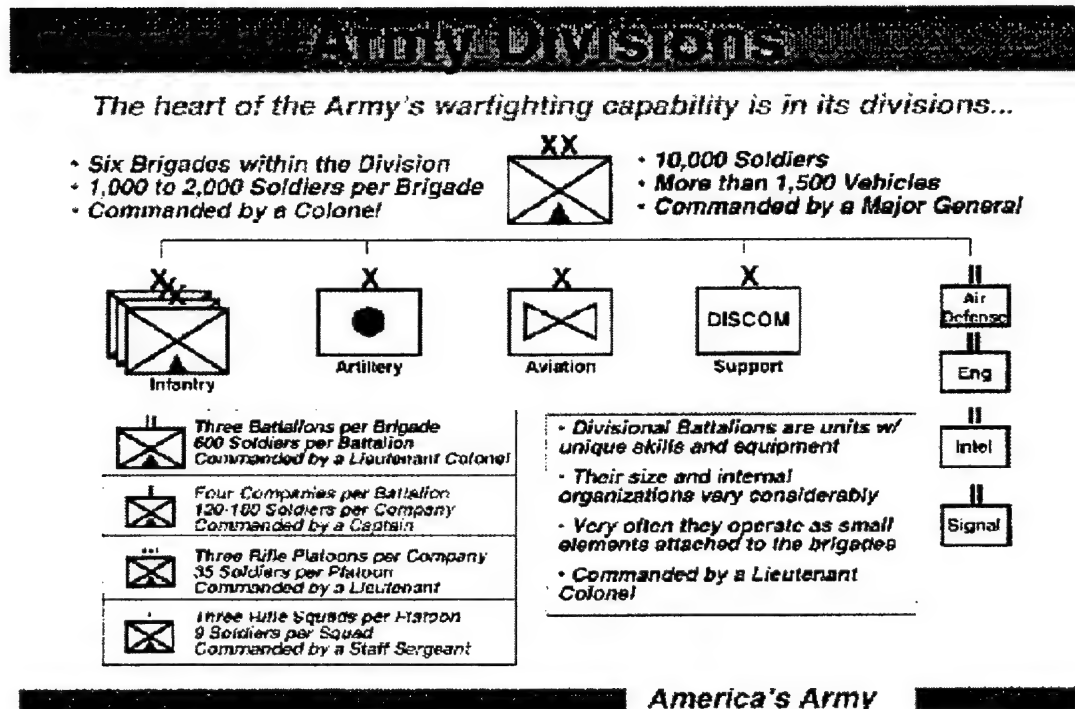


Figure 10. Source: *United States Army Posture Statement FY00*, 22.

On a given day, General Abrams notes the Army has 23,000 soldiers deployed in sixty-six countries conducting operations and training. TRADOC counts on The Center for Army Lessons Learned (CALL) to observe these training events, contingency operations, and mission rehearsal exercises to capture lessons learned and update doctrine. This information is then disseminated Army-wide to improve operations and training efficiencies. The Army hopes (with deference to General Sullivan's, "hope is not a method" belief) the service will be able to improve operations across the force

quicker by sharing unit innovations as they happen. In balancing near-term and future requirements, combat development becomes a crucial focus area. General Abrams acknowledges that the force multiplier technology offers must be balanced with the other Army core competencies, as equipment is only as good as the force that employs it. He affirms that modernization is critical to the Army maintaining its position of strength, and intends to leverage new developments as the concepts come to fruition.

Reduced OPTEMPO and increased capabilities relative to current technology would be a welcome change for the force and could on its own merit reverse the nagging retention problems by creating a force relevant to the times.⁷⁷ For its part, the Chief of Naval Operations (CNO) Johnson discussed Navy priorities to improve readiness. He related how reducing OPTEMPO was key to Navy retention of personnel in the fleet, and noted how the service just slashed sustaining base requirements by 25 percent to give time back to local commands.⁷⁸

To its credit, the Army has recognized and is improving some problem areas. An important modernization goal once the Army acknowledged its dependence on the reserve components was the integration of active and reserve units. The FY 2000 Army Posture statement noted the Army depends more on its reserve component than any other service, with 54 percent of the force in the reserves. These numbers broken down show the reserves contain 56 percent of combat units, 66 percent of combat support units, and 72 percent of combat service support units (see figure 11).⁷⁹ Efforts between FY 1992 and FY 1998 provided over \$21.5 billion in equipment to the reserves, with maneuver, aviation, and transportation units benefiting most.⁸⁰ According to the *Army Logistician*,

the Army also intends to convert up to 12 Army National Guard combat brigades to combat support and combat service support units by FY 2009.

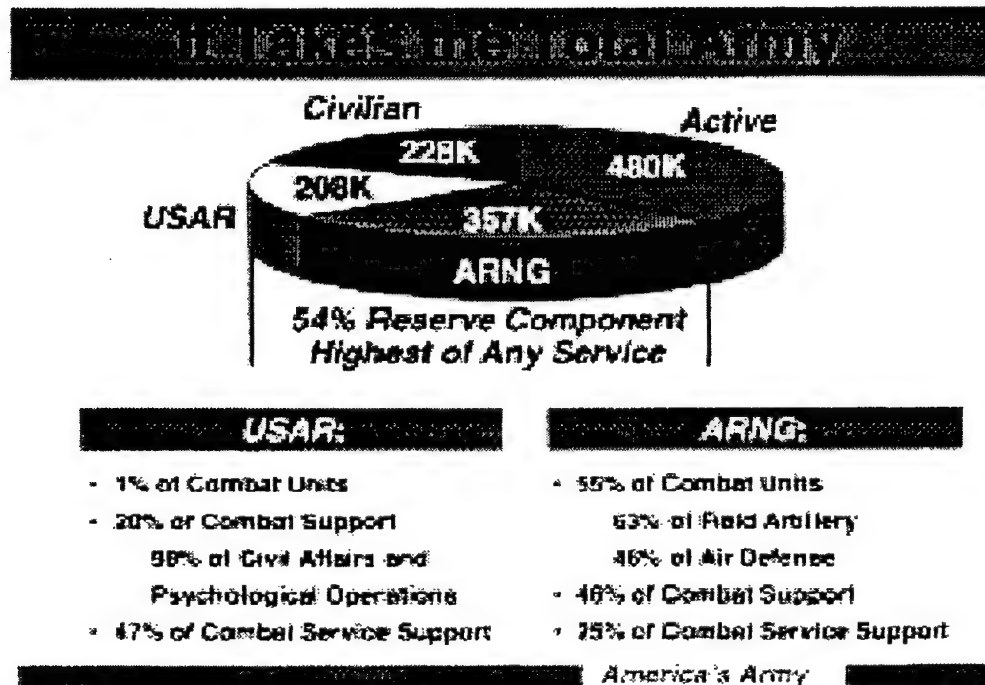


Figure 11. Source: *United States Army Posture Statement FY00*, 18.

Poised to benefit further from improving service operations, the JEF concept could yield tremendous opportunities for the Army and sister services as part of the joint team to realize synergistic improvements over current service capabilities. The tailored force design of the JEF puts the best of each service at the disposal of the joint forces commander (JFC) and enhances unity of effort. The designed permanency of a standing JEF headquarters in the original concept called for periodic exercises where identified component forces would fall in and conduct joint contingency training.⁸¹ The concept revisited would intertwine other GOs and NGOs with military forces to enhance US capabilities for conducting MOOTW. The enhanced capabilities of the JEF would likely

support a willing reduction in redundancies among services who would in turn be able to further refine their unique skills, all the while increasing efficiencies of the composite force.

Aligning the JEF under Joint Forces Command as the joint force provider, trainer, and integrator for the warfighting CINCs could provide the supportive environment needed to allow the concept to take root. Though a JEF opponent could argue that the initial expense and difficulty of determining a lead agency would undermine the effort, the evident synergy of this JEF would quickly dismiss threats to its existence. In fact, PACOM is conducting similar efforts through the AJFP initiative, further strengthening the argument for adaptive joint/interagency forces.⁸² Service parochialism aside the potentially contentious issues of training costs and the assignment of capabilities could be overcome relatively easily with alignment of the JEF, or similar force, under JFCOM. The Army to its credit is already experimenting with the Joint Contingency Force (JCF) concept, executing a series of advanced warfighting experiments (AWE) this year in concert with the other services to improve joint warfighting capabilities.⁸³

Future

Future threats are expected to be increasingly complex, with sources of conflict intensifying as the world population increases.⁸⁴ Evolving threats, such as transnational crime, terrorism, and drug trafficking, are projected to create unique security problems of their own. The uncertainty of this environment complicates development of the NMS and identifying the role of the military in addressing these new requirements. In *Insights from the Army after Next*, Wass De Czege and Echeverria suggest suppressing and

containing conflict will become increasingly critical since economic, humanitarian, and environmental costs will often reach beyond the immediate area of conflict.⁸⁵ A recent article in the *Washington Post* called for the US and allies to develop more expeditionary forces to deal with the pressures of conflicts outside of conventionally recognized warfare.⁸⁶ The authors contend this force would enable troops to more rapidly deploy and would provide greater combat power to reduce the possibilities of casualties.

Ideas on developing a future force have existed throughout history, with modern discussions persisting perhaps since *Buck Rogers in the Twenty-First Century* first came to print. More recently, the Defense Science Board in 1996 examined the need for future “early-entry” forces. In response, the Army offered a highly lethal, advanced capability force dubbed “Task Force Griffin” that drew its advantage over the enemy from advanced command, control, and sensor systems.⁸⁷ Looking ahead, the Army is pursuing several other efforts including the Command Post of the Future, and the AAN concept to lead force development well into the next century. Most efforts are looking out more than a decade attempting to anticipate the future strategic environment and corresponding Army requirements. In similar light, the Army originally planned to experiment with the strike force concept for several more years, before making this capability available to the CINCs in 2003.⁸⁸ According to the *Government Executive*, Vickers and other critics suggested the substantial long-term effort of developing battle staff capabilities without any corresponding improvement in warfighting systems distracted the Army’s focus and was an exercise in futility.⁸⁹

The new CSA General Shinseki and Army Secretary Caldera have declared they want a relevant force today, and are aggressively leading the transformation of the entire

Army into a more dominant and strategically responsive force.⁹⁰ Accordingly, Shinseki canceled the Strike Force effort that was by many accounts simply repackaging old technology without solving the remaining issues of deploying and sustaining the force.⁹¹ According to Shinseki and Caldera, the Army will jump-start development of concepts and doctrine, organizational design, and training by fielding a prototype brigade-sized force within the next few months using off-the-shelf systems.⁹² They intend to improve acquisition and sustainment responsiveness by reducing the numbers and types of systems and using split-based operations to reduce the logistics footprint. These innovations will result in a lighter logistics tail and rapid power projection capability for forward-based forces. Acknowledging the Army core competency remains warfighting, Shinseki emphasizes the need for agile formations and more versatile, lethal organizations.⁹³ To achieve greater survivability, he is calling for lighter more effective body armor along with better protection and greater acquisition range for weapon platforms.

While the Army at present believes the force capable of full-spectrum dominance, it admits the force structure is not optimized for strategic responsiveness. Consequently, the Army acknowledges it has limited warfighting CINCs' contingency response options.⁹⁴ As a force provider, the Army has only been able to offer the choice of light or heavy forces. Limitations of both variants have struck home, as it took the US six months to deploy and build up sufficient heavy forces to counter Iraq during Desert Shield. Meanwhile the shortcomings of light forces were dramatically observed during US intervention in Somalia as servicemen lost their lives in urban combat.

Answering the Chief's call, the Army is busily analyzing the development of the medium-weight, or "full-spectrum" force.⁹⁵ The end state of what has been dubbed the "Army's transformation strategy" envisions all Army formations to be strategically responsive and dominant across the threat spectrum. Specifically designed for employment as an early entry force, the near-term transformation through 2003 focuses on the medium-weight brigades under development at Fort Lewis. The mid-term transformation should be realized between 2003 and 2010, with fielding of the interim force design throughout the service. The Army expects in the process to be able to largely recapitalize the legacy heavy combat systems as conversion to the new force structure is achieved. These developments will provide a hybrid of legacy and interim forces across the Army as the active and reserve components increasingly share operational requirements. The end state, or far-term transformation of the force is projected for 2010 and beyond as the force design incorporates technologies and capabilities still undiscovered into the AAN.⁹⁶

The Army has appropriately identified the following core capabilities for the full-spectrum brigade to operate successfully across the operational continuum: enhanced situational understanding (SU) and information dominance; mobility; dismounted assault and superior close fight capability; lethality; holistic force protection and survivability; force effectiveness; reach-back; joint/multinational/interagency interoperability; full spectrum flexibility and augmentation.⁹⁷ The TRADOC Analysis Center (TRAC) has demonstrated situational understanding is the fundamental force enabler across all the BOSs and is accordingly the keystone for reducing brigade vulnerabilities. The brigade's success depends on information dominance over the enemy, relying on integrated

intelligence, reconnaissance, and surveillance (ISR) capabilities to provide a common operational picture at every echelon.⁹⁸

Analysis indicates the brigade will rely on mobility across the three levels of operations from strategic deployment to tactical engagement. For strategic relevance, the brigade must meet its 96 hours deployment standard. Operationally, the brigade must be able to self-deploy intra-theater, either by C130 or by ground. And tactically, the brigade requires the mobility of a mechanized formation, as it must be able to fight as part of the larger force in an MTW. Further Army analysis indicates the brigade will depend on achieving decisive action by dismounted assault, supported by on-board weapon systems; built around the nine man infantry squad, the Army believes it is appropriately organized.⁹⁹

Demonstrating superior lethality for both effective deterrence and for follow-on operations will increase success. The brigade must consequently possess a healthy array of potent direct and indirect weapons to influence the situation. The Army believes indirect fire and antitank capabilities must be embedded within maneuver elements down to company teams to facilitate small unit operations.¹⁰⁰ Associated equipment therefore includes the mobile gun system, TOW IIB and Javelin antiarmor systems, the heavy-to-light family of mortars, and rocket or cannon artillery. Planners intend to increase traditional effectiveness of these systems through greater mobility. Protecting the force in turn requires a precarious balance between sufficient armor and thinner-skinned vehicles for maneuverability. The brigade must consequently depend more on its protection through stand-off capabilities and organic counterfire capabilities leveraging ISR assets.

Recognizing that conventional US forces achieve superiority primarily through brute force overmatch, future forces will depend on information dominance to provide enhanced combat power through fuller situational understanding. The brigade will depend on information technology to offset the inherent limitations of the force. To counter the reduction in survivability and raw firepower, the brigade will achieve increased lethality through information operations. Further enhancing force effectiveness is the brigade's reach-back capability. The brigade will have a vast array of non-organic assets it can tap across the BOS to magnify its combat power: fires, intelligence, planning and analysis, force protection, and sustainment.¹⁰¹ Planners believe reachback will reduce the brigade's footprint substantially, without compromising its capabilities, and the enhanced operational agility of the force will dramatically reduce its force protection requirements. Intending for the full spectrum force to be configured and sequenced for operations immediately upon arrival in theater, the brigade is task organized around a mounted infantry core of three battalions (see figure 12).¹⁰² Major subordinate elements include a reconnaissance, surveillance, and target acquisition (RSTA) squadron, an antitank company, an artillery battery (cannon or rocket--analysis dependent), an engineer company, a signal company, a military intelligence company, a forward support battalion, and a headquarters element.¹⁰³ Currently configured, the medium-weight brigade contains roughly 3,500 soldiers, operating its primary combat platform, the still undetermined medium armor vehicle (MAV). Focusing on a common platform to reduce the logistics footprint and standardize trafficability across the force, the MAV will be the platform for the infantry, armor, mortars, RSTA, antitank, engineer, and most of the command and control vehicles; associated wheeled vehicles will also be

based on common platforms. The Army notes it will continue pursuing leap-ahead capabilities required for the future combat system, while developing interim force redesign.

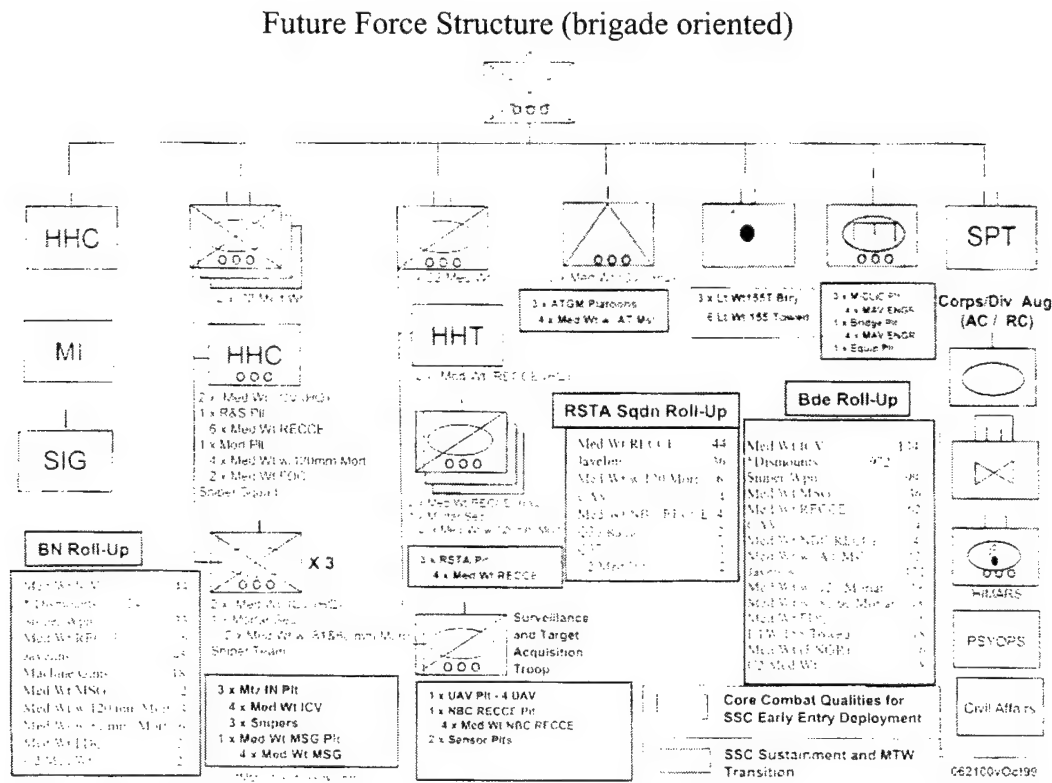


Figure 12. Source: *Medium Weight Brigade O & O Plan*.

Force Projection

The AAN analysis acknowledges the increased complexities of future conflict and foresees the rise of one or more major military competitors, generally regionally focused who will likely develop asymmetrical capabilities to attack perceived US weaknesses.¹⁰⁴ Successfully employed, these strategies could quickly undermine the US and friendly coalition wills to fight. Wass De Czege believes a first rate US military, capable of

winning across the spectrum of conflict, will limit the potential impact of these threats to deployed forces and sustaining bases.¹⁰⁵

To achieve this first rate status the Army needs to revamp its power projection capability. Current military operations demonstrate the need to use a combination of forward-deployed and forward-based forces in concert with CONUS forces to respond to crises. The current lack of broad-ranging swift responsive capabilities gives antagonists great freedom in committing atrocities without the immediate fear of reprisal. Theorists suggest future force posture should alleviate the need to mix and match forces. One argument notes the power projection forces must be able to quickly execute operational maneuver over strategic distances to be a viable deterrent.¹⁰⁶ The AAN program developed a JEF prototype comprised of highly integrated land, sea, air, and space forces to address these concerns. In this scenario JEF rapid movement capabilities combined with forward-deployed operational forces facilitated decision making and allied support of effort.¹⁰⁷

General Robertson, CINCTrans admits the military has neglected its transportation infrastructure with facilities both stateside and overseas deteriorating as a result.¹⁰⁸ The net effect he acknowledges is a situation in which the nation's port and harbor facilities, rail spurs, airfields, and fueling systems cannot support air, land, or sea movement required to meet the warfighting CINC requirements. Commander-in-Chief US Transportation Command (CINCUSTRANSCOM) calls for the US military to move from a reactive posture to a proactive approach in correcting force projection deficiencies. In calling for increased efforts among the services, General Robertson strongly endorses Army efforts to improve its "fort-to-port" infrastructure through the

Army Strategic Mobility Program (ASMP). And he compliments the Defense Logistics Agency's reallocation of resources to improve critical aircraft refueling infrastructure both stateside and overseas. General Robertson believes these concerted efforts will enable the US to achieve the medium-risk force closure timelines required by the warfighting CINCs in any potential conflict.¹⁰⁹

Current contingency requirements demand the capability to deploy three divisions into a theater within 30 days, and another two divisions with sustainment capabilities within the following 45 days. Accordingly, the ASMP is focusing CONUS power projection improvements on fifteen key installations, fourteen airfields, seventeen strategic seaports, and eleven ammunition depots and plants.¹¹⁰ The Army is addressing its force projection shortcomings and has encouraged the Air Force and Navy to improve their strategic lift capabilities as well. The Army continues to improve its power projection capability by increasing pre-positioning equipment stocks overseas near potential trouble spots. Noting service intentions to soon add an eighth brigade set to its strategic storage inventory, the Army intends to increase its Southwest Asia capability to a division base set by FY 2001.

Sister service initiatives include the Air Force committing to improving airlift capabilities for Army equipment through adding 120 additional C-17A transports by FY 2003 to its fleet, while continuing to upgrade its current C5 inventory. To increase sealift capacity, the Navy is adding nineteen large, medium speed roll-on roll-off (RORO) ships to its inventory. Eight are slated to carry pre-positioned stocks and eleven to support the surge requirements of heavy forces. Additionally, another program focuses on Logistics Over the Shore (LOTS) to transport supplies from strategic lift assets ashore through

restricted access ports or unimproved shorelines. Using utility craft and floating cranes, for example LOTS will remove current port facility restrictions that limit suitable surface ports of debarkation (SPOD) for deploying forces.

The Army is demonstrating its commitment to force projection enhancements with AMSP efforts totaling \$3.5 billion in strategic mobility projects between FY 1998 and FY 2003 to improve deployment infrastructure.¹¹¹ Projects include improving and expanding facilities, upgrading containerized port facilities, purchasing railcars, watercraft, movement control systems, and improving training. Strategic improvements aside, General Schwarz, says, FORSCOM alone is short \$621 million from what it needs today to get to a fully balanced readiness status.¹¹²

Forward Based versus Deployed

General Tilelli, Commander in Chief United Nations Command and US Forces Korea, testified before Congress that a combination of forward-based and deploying forces were key to defending Korea.¹¹³ To achieve the theater mission of maintaining the armistice, deterring aggression, and remaining ready to fight and win, the command maintains a strong forward presence and depends on a rapid reinforcement of forces from the US. He believes the greatest threat to peace and security in Asia is North Korea, based on their aggressive pursuit of weapons of mass destruction and their heavy defense expenditures. Consequently, General Tilelli believes friendly forces will suffer greater casualties the longer it takes to build up necessary combat power. He argues the current US force structure provides the minimum capability to support two major theater wars (MTW), and states force projection of trained and ready units from the US is vital to the

execution of his campaign. Tilelli believes the limited airlift and fast sealift assets will impede the rapid movement of forces and supplies to Korea. He calls on improvements to the nation's strategic lift program to address these shortcomings and in the meantime to counter the strategic lift shortfall, admits US forces will depend on pre-positioned stockpiles of equipment and supplies.

General Schwartz, Commander of US Army Forces Command, in testimony before the HASC on readiness in 1999 discussed where FORSCOM was in support of the NMS and challenges to readiness.¹¹⁴ He noted that FORSCOM forces were fully engaged worldwide as well as in CONUS supporting the NMS. Units were demonstrating readiness through deployments, conducting missions, sustainment operations, and rigorous training exercises. General Schwartz stated that at the time of his testimony he had over 22,000 soldiers deployed away from home station and in thirty-one countries. He explained how units were fully supporting unified CINC requirements to shape the geostrategic environment around the world by providing units and individual soldiers for various exercises. As the Army's largest force provider General Schwartz noted his forces had conducted major deployments to deter aggression in Southwest Asia.

Lieutenant General Coburn Army Deputy Chief of Staff for Logistics (DCSLOG) in testimony before Congress on readiness identified logistic capabilities and shortfalls in support of the NMS.¹¹⁵ He noted that as a force projection Army, forces have to deploy quickly and efficiently from CONUS. He further explained that this requires three key components: pre-positioned equipment, strategic lift (air and sea), and a solid infrastructure. He noted that the Army's pre-positioned force posture has dramatically improved from 1990 when it had only two brigade sets in Europe to seven strategically

located today in Europe, Southwest Asia, Korea, and elsewhere afloat. This translated into a capability for the Army to put a heavy brigade on the ground in Southwest Asia in four days.

Deployment Capabilities

General Robertson, Commander in Chief US Transportation Command, in testimony before the HASC on readiness in 1999 stated the country's national security depends on a potent power-projection capability.¹¹⁶ He commented that a combination of air, land, and sea assets; worldwide infrastructure access; robust information systems; totally integrated Reserve and National Guard support; and strategic partnerships with the commercial transportation industry gives the US this capability. He noted his top priority remains readiness to support the warfighting CINCs, and that readiness is comprised of reliable air, sea, and land equipment; high quality, trained personnel; and modern infrastructure. He identified significant concerns with TRANSCOM's readiness. Readiness General Robertson noted is dependent on the strength and agility of its three component commands: The Army's Military Traffic Management Command (MTMC), Military Sealift Command (MSC), and Air Mobility Command (AMC). He affirmed the synergy of military and commercial transportation systems, intermodal operations, and afloat pre-positioning equipment in meeting the warfighting requirements. General Robertson noted the target mission capable rate for his primary airlift assets, the C-5 to meet the warfighting CINC requirements is 75 percent, yet the typical mission capable rate hovers near 61 percent, shorting the equivalent of thirty-two C-5 missions daily against the required wartime utilization rate.

General Coburn says the Army is committed to overcoming deficiencies in supporting two MTWs. By using a combination of on-hand stocks, war reserves, and industry partnerships it can sustain one MTW with moderate risk, and two MTWs with high risk. Another effort to improve readiness and reduce costs involves revolutionizing the equipment repair process. General Coburn says the Army is moving towards integrating embedded diagnostics and prognostics into major weapon systems and electronically linking them to the ordering process. Additionally, the Army is also using commercial technology and practices to institute electronic manifesting, tracking and receipt of shipments, with a verified accuracy at 98 percent. He notes the Army has essentially completed implementation of the Total Asset Visibility (TAV) system that maintains visibility of 99 percent of reparable equipment and repair parts. General Coburn says this information is available to any commander in the Army, Defense Logistics Agency (DLA), and sister services and will provide increased confidence in the Army's ability to rapidly fill field requirements.

To the Army's credit it is developing the transformation force mindful of strategic lift limitations. Planners are maximizing Army capabilities for the future while operating within known constraints; these concerted actions will surely maximize the Army's relevance in future operations supporting the national and theater objectives. Mandating that the force must share common platforms and be transportable on C130 aircraft, the Army is working hard to make the service the nations force of choice.

Barriers to Relevancy

Like the French in 1940, we were superbly ready: they for World War I, and we for another Korean war.¹¹⁷

Jeffrey Record, *Ready for What and Modernized Against Whom?*

Admiral Blair's concerns with force readiness typify the concerns of all the warfighting CINCs. In identifying PACOM priorities, Admiral Blair singled out readiness, regional issues, RMA, and resources. He noted his current readiness concerns stem from recruiting and retention of quality forces, logistics and sustainment shortfalls, and an aging fuels infrastructure. The logistics and sustainment shortfalls included Army pre-positioned stocks located in Korea and Japan to support contingencies. The most serious infrastructure problems were identified as aging fuel systems in Alaska, Hawaii, Guam, and Japan that would in conflict or crisis impede strategic airlift across the Pacific.

General Schwartz states that FORSCOM installations double as power-projection platforms and argues that the Army needs to do more to improve the infrastructure, from firing ranges and training areas to communications and transportation networks. He notes that without sufficient infrastructure the Army's ability to project power is diminished. In addressing the challenges to readiness, he has developed a campaign plan that will enable FORSCOM to provide the most capable forces to meet the requirements of the nation and the NMS. In this endeavor, the plan counts on the seamless integration of the active and reserve components, acknowledging that 74 percent of FORSCOM forces are reserves.

Wass De Czege and Echevarria believe American landpower along with its allies will bear the brunt of maintaining and shaping the peace.¹¹⁸ Consistent with US national security policy of selective and effective involvement in multilateral peace operations the US will have to contribute an operationally significant landpower force to lead any regional contingency effort. Landpower advocates note ground forces are essential to taking and holding ground, supporting the winning of decisive campaigns, and the achievement of durable peace.¹¹⁹ Without more serious commitment, the Army may never get there. Critics such as Hillen and Vickers argue the Army recognizes its limitations caused by the concentration on heavy forces and needs to overcome internal conflicts to move forward decisively.¹²⁰ They point to the cancellation of innovative programs like the Armored Gun System and the 9th Motorized Division, as reflecting the Army's lack of support for true change. As Hillen notes, "the Army's budget priorities are balanced in the direction of having marginally improved Desert Storm products."¹²¹ Referring to service budget documents, Hillen says the Army will spend roughly one-half of its \$9.7 billion procurement budget upgrading the current combat vehicle and helicopter fleet, and developing the new heavy artillery Crusader system.¹²²

Focus: Disunity of Purpose

The difficulties former CSA Gordon Sullivan encountered with Army modernization efforts during his tenure highlight the problems blocking progress.¹²³ He attempted service reform in the early 1990s only to encounter serious opposition from intra-service rivalries.¹²⁴ Encapsulating the disunity of purpose today in Army force development, defense analyst John Hillen notes that heavy divisions with advanced

capabilities have become 50 percent heavier since the Cold War, without corresponding efforts made to improve their rapid deployability.¹²⁵

Complications of modernizing the force continues as critics analyzing force digitization maintain, with the Army's main modernization effort after five years and hundreds of millions of dollars achieving questionable results.¹²⁶ While acknowledging the importance of heavy forces to support the higher end of conflict, critics argue the demands for massive armored forces went out with the Cold War.¹²⁷ Force digitization initiatives are unquestionably identifying advantages that US forces could leverage in future combat, though the relative merit of wholesale investment in these technologies today should be compared to buying a personal computer system. Public reports indicate computer systems double in capabilities every eighteen months while prices drop by one-half. In turn, instead of forcing something to work today, the Army should continue exploring advanced technologies. When discoveries readily provide distinct, affordable, and useful benefits, the Army should outfit its forces accordingly.

Major General Zanini, head of combat development at TRADOC acknowledges the Army has not made future force requirements a high priority in the past, citing the \$25 billion investment in the Abrams tank as a reason.¹²⁸ He notes the Army is adjusting to change under an approach called "selective modernization," where it will upgrade a portion of the armored force, while phasing in lighter combat vehicles as technology allows. Zanini says the Army has learned a tremendous amount from the Advanced Warfighting Experiment, already adjusting the size and shape of future forces while providing greater lethality.¹²⁹ The Army acknowledges to provide the next generation combat systems with a threefold increase in effectiveness and mobility over current

systems with one-third the sustainment requirements it will need to implement “leap-ahead” technologies. The status of funding for these efforts though points out the continued resistance to change, as the Army has not dedicated any of its \$4.1 billion research and development budget to such a program according to the *Government Executive* report.¹³⁰ Hillen and others fear the Army bureaucracy is squelching innovative thinking and forcing compliance with traditional complicated methods for inducing change, tactics that will unnecessarily delay the Army’s preparedness for twenty-first century warfare.¹³¹ They argue the senior leadership has to get beyond the “crawl, walk, run mantra” in renovating the force and making the Army relevant for the new millennium.

Complexity

The National Defense Panel recently concluded the two MTW requirement inhibits the US military ability to prepare for likely threats. The the concept increasingly appears to be a force-protection mechanism (to retain current force structure) rather than a reasonable strategy to support the NSS.¹³² Acknowledging esteemed panel the two MTW scenario was useful in refocusing the military after the Cold War, these noted experts believe the validity of this threat is quickly passing. Specifically, the panel argues organizing US forces around MTWs is too constricting and unrealistically suggests the military will have substantial notice as conflicts slowly evolve. This faulty perception has led to an Army that cannot quickly deploy appropriately configured and ready combat forces worldwide. The repercussions magnify up the chain of command as the warfighting CINCs and the NCA are deprived of national assets.

Recognizing the low US tolerance for casualties, Zanini believes future enemies will attempt to negate US advantages as the Somalia warlords did.¹³³ Peace operations since Somalia have posed more of the same challenges where combatants and civilians were virtually indistinguishable. Specifically, Zanini argues as the Marines do, that future threats will operate increasingly among civilian populations in urban areas, attacking US forces with terrorism and other asymmetric acts. The Army has been unbelievably slow to react to the tragedy of Somalia where urban combat killed eighteen Americans and wounded seventy when the US military was pinned down for twenty-one hours by “third-rate forces.” The US Marine Corps on the other hand officially recognized the significance of urban warfare three years ago when their Commandant introduced the Urban Warrior series of exercises emphasizing the future of warfare as they saw it unfolding with peace operations.

In preparing the military for the future, the National Defense Panel argues transformation should not be dominated by efforts to build up legacy systems. Removing these barriers should facilitate fresh ideas, unburdened by size or conventional weapon characteristics that would themselves be obsolete as they entered development. These experts believe the next generation military should have these force characteristics: systems architectures enabling distributed operations; information system protection to ensure information dominance; information operations to facilitate nonlethal combat; automation to compress time requirements; smaller logistic footprints to minimize threats; increased mobility to improve protection and synchronization; and improved stealth, speed, precision and stand-off distances to overwhelm the enemy at less risk to friendly forces.¹³⁴

Continuing their argument further, the national defense experts questioned the continued evolution of the Abrams main battle tank and the projected fielding of the Crusader and Comanche systems. The panel concludes that limited numbers of these conventionally oriented systems could be fielded to III Corps as a strategic hedge while the Army continues developing Force XXI. Meanwhile the balance of the Army efforts they argue should focus on developing the force for the next generation, the AAN.

The original JEF concept, though innovative in part, was too cumbersome in its stated activation requirements. It envisioned the headquarters to be headed by a two-star officer, organized with a traditional staff, yet activated one year out from its scheduled deployment.¹³⁵ Additionally, the original concept called for the staff to take the initial six months of activation to determine the most likely missions it would be called upon to face and to coordinate with the CINC in whose AOR it would likely deploy.¹³⁶ This approach proposed that awareness six months out would allow the JEF commander to tailor his force structure to meet anticipated mission requirements and would then enable him to formally request forces from the supported CINC's service components.

The reality of today's environment as evidenced from recent nearly simultaneous deployments in support of multiple CINCs is that a six-month lead-time is unrealistic, and in fact useless. First-hand accounts from the author working with the Joint Staff and a supporting joint agency over the last three years highlight the fluid situation around the world where standing requirements in CENTCOM and EUCOM, along with periodic occurrences in SOUTHCOM and PACOM, often provide less than several weeks notice for the respective CINCs to stand up and deploy a JTF.¹³⁷ In one instance Army Forces Central Command (ARCENT) activated and deployed JTF Kuwait forward in less than

four weeks from notification by CINCCENT to initiate Operation Desert Thunder, while in another instance JTF Nobel Anvil was activated and operational within three weeks of notification by CINCEUR to support Operation Allied Force.¹³⁸ Today's complex global environment generally precludes structured attempts to forecast months out what requirements a CINC may have other than recurring joint exercises or support for continuing operations.

Force Projection

Based on airlift shortfalls CINC Strategic Command (STRATCOM) stated the projected loss for a regional warfighting CINC over a 30-day period translates into losing the capabilities of all of the following: one light infantry division, one airborne brigade, three attack helicopter battalions, and three fighter squadrons.¹³⁹ Task Force Hawk highlights the Army's inability to deploy, as it took more than a month this past spring to organize and deploy into Albania in support of Operation Allied Force. In the end this force suffered the only American casualties of the campaign without being committed to combat.¹⁴⁰

General Robertson notes the halting phase of any conflict stipulates a timeline for equipment that can only be met via airlift, acknowledging this includes as much as 70 percent of a regional warfighting CINC's cargo requirements for initial combat, including helicopters, Patriot missile batteries, Bradley fighting vehicles, and Abrams tanks. In addressing TRANSCOM's ability to support two MTWs, Robertson notes that readiness depends on robust, flexible sealift, including pre-positioned equipment and supplies afloat, surge sealift for rapid power projection, and sustainment sealift for ongoing

combat operations. Improving from Desert Storm, he says TRANSCOM has increased the afloat pre-positioning capacity to 90 percent of requirements, having recently investigated the impact of pre-positioning an eighth brigade set afloat.

Opportunity Costs

General Zanini, deputy chief of staff for combat developments at TRADOC, acknowledges the Army has not been quick to fund future force developments, citing the large capital investments in current systems.¹⁴¹ He explains that the Army has a \$25 billion commitment to the Abrams tank that cannot be disregarded and suggests that selective modernization is the answer. According to Zanini, the Army could upgrade a portion of the armored force, phasing out older equipment with lighter more adaptable technology.¹⁴²

In investigating Army redesign proposals, Bradley Graham of the *Washington Post* discovered considerable resistance within the traditional “heavy” branches of Armor and Artillery. According to discussions with Tom McNaugher of Rand’s Army Research Center, the armored community is uncomfortable with a lighter, less survivable vehicle dependent on speed and battlefield awareness for survivable.¹⁴³ Graham’s research showed the Army could finance the necessary transformation without additional funding by cutting back on obsolete programs. Specifically, the service could save \$11.5 billion from scrapping the Crusader heavy howitzer system and at least a part of the \$48 billion Comanche scout helicopter program.¹⁴⁴ Both programs were designed during the Cold War under a cumbersome development program that no longer counters emerging threats. Additionally, an analysis submitted to the *Army Logistician* says the service should

expect to save over \$10 billion between FY 1998 and FY 2003 by realizing efficiencies and cost savings from defense reform initiatives.¹⁴⁵ Altogether, these figures suggest funding in excess of \$50 billion could be made available, and that with commitment of senior leadership, the Army has the means to fund development efforts and speed transformation of the force into one relevant for the times.

Fundamental reform of the Defense Department's support infrastructure is key to an effective transformation to the future according to the National Defense Panel.¹⁴⁶ DoD is encumbered by the expansive obsolete Cold War support infrastructure. Much of this infrastructure was based on maintaining industrial and manpower mobilization for large-standing forces of a former era. According to figures provided by the Government Accounting Office (GAO), the DoD spent \$146 billion in FY 1997, equivalent to nearly 60 percent of its budget, on defense support activities. Incredibly, the proportion of resources devoted to infrastructure has increased as the declining force structure outpaces support structure reductions. Without serious execution of Defense Reform Initiatives the military will be hard pressed to implement planned modernization let alone keep pace with evolving threats to US national security.

The Way Ahead

Millions will listen to, and prefer to believe, those who tell them that they need not rouse themselves, and that all will be well if only they continue to do all the pleasant and profitable and comfortable things they would like to do best.¹⁴⁷

Walter Lippmann, in *Transforming Defense, National Security in the Twenty-first Century*

Futurists believe the battlefield will become more urbanized as the global population grows, with 65 percent of the populace expected to be living in cities.¹⁴⁸ The projected population increase couple with increasingly scarce resources is anticipated to stratify the differences between developing and non-developing countries. Compounding the situation is the estimate that the majority of the population increase will be in the poorest regions of the world. Others believe the overpopulation will magnify instances of disease, crime, and scarcity of resources reminiscent of recent US experiences in Somalia.¹⁴⁹ Arguments of future internal strife in third world countries suggest more concern with personal well being than national welfare, resulting in increased crime and the growing emergence of gangs. In response, neighboring states will scramble to prevent these external influences from infecting their societies, with traditional geographic boundaries dissolving in favor of cultural barriers. Though this vision of the future may in fact seem rather extreme, the US Marine Corps has instituted urban warfare into their tactical training to prepare for such possibilities.¹⁵⁰

Technology has dramatically changed the military environment. Over the years, armies have either successfully incorporated technology into their tactics, or have found themselves reeling from an adversary who did. Today, visualization of the battlefield has transcended above the horizon, and beyond the traditional linear arrangements of forces. This battlespace visualization provides an all-encompassing three-dimensional awareness of the environment, replacing the traditional, comparatively simple, two-dimensional linear focus. Information technology is enabling decentralized operations and multiplying combat power by orders of magnitude through improvements in weapon system synchronization. The projected increase in capabilities has created a greater role

for the Army in future warfighting. According to Wass De Czege and Echevarria, AAN wargames have repeatedly validated the essence of the following tasks with regard to crisis response: achieving information dominance; employing forward-presence forces; projecting operationally significant landpower; and evacuating US and allied citizens.¹⁵¹

In identifying assets that will improve warfighting capabilities, the Army Experimentation Campaign Plan (AECPP) maps out future experiments supporting Army XXI development.¹⁵² The AECPP is oriented along three axes to provide the framework for new organizational design and concepts: Light Contingency Force, Mechanized Contingency Force, and Medium-weight Contingency Force (formerly strike force). The Army intends for the AECPP to move the force from concepts to capabilities and organizations that will form the next generation Army, the AAN. The experiences and analysis gained from the AECPP will allow the service to synchronize the six Army imperatives for readiness over the long term: doctrine, training, logistics, organization, materiel, and soldiers (DTLOMS). Related experiments with each of the three force variants will assist the Army in identifying and addressing both evolutionary and revolutionary developments in land warfare.

Supporting force development, the Army's preparation for the future in logistics is defined by the Revolution in Military Logistics (RML), in coordination with and support of the DoD Strategic Logistics Plan, and the Joint Staff's Focused Logistics vision. The DCSLOG General Coburn says the RML will transform Army logistics from an inefficient system of massive stockpiles to a distribution-based system anticipating warfighter requirements. Toward this end much has been done to modernize logistics within the theater of operations. The Theater Support Command (TSC) has been

redesigned to support innovative distribution such as roll-on/roll-off platforms that allow combat configured loads to be throughput from CONUS to the forward unit.

Additionally, the newly developed palletized load system (PLS) will significantly assist the forward units by reducing material handling equipment requirements.

Future Security Environment Scenario

A discussion of the future would be incomplete without introducing a more long-term view, coincident with AAN scenarios, the Quadrennial Defense Review (QDR), National Defense Panel views, and as reflected in the work of the US Commission of National Security for the twenty-first Century. The ensuing force structure reflects military requirements as notionally outlined in a future QDR, in accordance with the environment described in the US Commission's analysis of twenty-first century national security.¹⁵³ The following futuristic scenario unfolds two decades out. In 2020, the security commission calls for the US to act together with its allies to shape the future using all instruments, diplomatic, economic, and military.¹⁵⁴ To improve interagency cooperation in support of US national security, the Cohen Commission was earlier chartered to rethink and adjust the mix and effectiveness of national security assets. Recommendations of the Cohen Commission led to the establishment and well-coordinated operations of permanent interagency task forces (IATF) to counter terrorism, drugs, weapons of mass destruction, and information operations (IO), and to conduct disaster relief operations.

The Unified Command Plan was adjusted to reflect changes appropriate to the times. CINCUS was formed in 2005 to address growing concerns of homeland defense

and asymmetric threats, including IO, WMD, TMD, and disaster relief. In the process, CINCSPACE was refocused on space-based systems for strategic application. Trying to get a better grasp on the western hemisphere, the EUCOM AOR was reapportioned to include North Atlantic areas formerly included in JFCOM. On the southern extreme, the SOUTHCOM AOR was reapportioned to include South Atlantic areas formerly assigned to JFCOM; additionally, SATO (South Atlantic Treaty Organization) was formed to address security concerns and transnational threats South of the border.

The 2000 analysis of the future global environment led to an overarching defense strategy, and an updated QDR to deal with the emerging world.¹⁵⁵ The fresh look at the future forecasted a force dramatically different than what existed at the turn of the century to be able to quickly engage troublespots. As the century unfolded, the US proceeded to reduce its overseas military presence to increase the sovereignty of the emerging democracies and decrease perceptions of imperialism and possible animosity. The creation of regional response forces, along with increased economic prosperity, and regional stability caused the US to remove its overseas forces and to encourage greater regional autonomy. Through updated defense agreements the US continues to support regional security through periodic multinational exercises and troop deployments. This policy endures worldwide though small specialized teams continue supporting allies across the globe. The only exception to this practice is in Latin America where Mexico and Columbia have achieved limited success in fighting terrorism and drugs. The US maintains a standing IATF based out of Honduras, with supporting unit rotations out of the states to continue these campaigns.

Aligned to address security concerns of a new era, the US military in 2025 thrives on enhanced force capabilities. The high-tech rapid deployment structure of the military guarantees unlimited college educated recruits looking for adventure in serving the nation. Due to its increased capabilities the force is substantially smaller than its conventional counterpart of 2000. Leveraging full-dimensional protection to achieve rapid and sustained success across the conflict spectrum, coupled with focused logistics to support the force anywhere at anytime, the force of 2025 is without equal in lethality and survivability. Technology allows a maneuver platoon to cover the combat requirements of a former conventional battalion. Fast sealift based on a cruising speed of one hundred knots delivers land forces at any echelon worldwide with equipment within twenty-four hours. Hydrofoil arsenal ships with similar speeds, along with accompanying vertical take off and landing (VTOL) aircraft have replaced the traditional aircraft carrier as the flagship of the fleet. The Air Force retains the mission of defending CONUS airspace in support of CINCUS and maintains reserve transports to meet lift requirements outside the Navy's littoral reach.

Highlights of the 2025 QDR show the Army will retain six active, combat-ready divisions utilizing the "battleswarm" concept previously discussed by John Arquilla and David Ronfeldt in 1998.¹⁵⁶ The concept calls for units relying on superb battlespace awareness. US forces spread throughout an area of operations would suddenly unite, as though a swarm of bees, destroy the enemy, and immediately disperse to continue independent actions. With ground forces operating on an air cushion similar to advanced sealift, land maneuver becomes less restricted by terrain and more able to quickly cover great distances. Additionally, the smaller operating footprint of future maneuver forces

operating with these new tactics drastically reduces threat opportunities. These increased capabilities allow active force levels to be cut substantially, with the Reserves maintaining an appropriate mix of conventional heavy divisions (with updated weapons, sensors, and survivability), along with an equal number of battleswarm units as contingency packages.

The Navy will maintain four arsenal battle groups (ARBG) and six amphibious ready groups (ARG), while dramatically reducing the number of surface combatants and submarines. As with the Army, advanced capabilities will allow substantial force reductions throughout the Navy and return increased defense savings to the treasury. The surface fleet will be reduced from 340 ships to 200, predominantly consisting of fast cruisers, assault ships, and support ships configured around the ARBG. The balance of the fleet is fast sealift to deploy ground forces and to otherwise support surface operations. The number of attack submarines will be reduced from 50 to 20 stealthy fast-attack submersibles. The fighter aircraft inventory is reduced from 700 to 400, in proportion to the removal of the carriers from service. One arsenal ship will maintain a wing of 50 VTOL joint strike fighter jets, each capable of electronic warfare (EW) operations through the backseater, along with supporting surveillance and transport aircraft. Each ARG will maintain a "short-wing" consisting of 20 VTOLs and 10 V-22 Improved Ospreys.

The Air Force having previously consolidated fighter and bomber units to streamline its command structure, while outsourcing intelligence and support operations, is maintained primarily for CONUS air defense. The service performs a secondary role as strategic lift reserve to transport ground forces lacking Navy lift support. In light of

the reduced uniformed requirements and due largely to service inabilities to retain qualified pilots, the Air Force reduced its fighter wings from twelve to four and its bomber wings from five to two. Though the Air Force maintains a proportionate number of refuelers and transport planes to support mission requirements, the service transferred most to the reserve fleet. Rounding out the total force picture, the Air Force Reserve maintains an equivalent number of comparably equipped combat and support forces for contingencies.

The Marine Corps suffered little force reduction as its forces were already streamlined. The service maintains a primary role in littoral missions, and practices battleswarm tactics similar to the Army as a result of Secretary of Defense (SECDEF) focus on ground forces operating across the continuum. Standard tactics and equipment facilitate Army and Marine ground forces routinely conducting supporting operations. Recognizing the increased demand for quick engagement operations, the Marine Corps maintains its own fast sealift capability and is organized around six ARGs.

The aforementioned US national security posture anticipated the developing world environment of the future. With global interests and regional security agreements, the US will endeavor to promote positive actions with limited threat exposure. Optimally configured to support US interests worldwide from home, the military force in this scenario has been reduced appropriately to balance domestic priorities. In keeping with regional allies assuming greater roles in their collective stability, US presence was reduced and forces adjusted to operate with smaller operational footprints. The US strategy for military employment evolved to emphasize rapid quick-strike capabilities, with immediate subsequent removal of forces to support regional stabilizing efforts. To

this end, the US maintains a tremendous capability and in exercising its might in support of democracy and global stability from US shores, will minimize potential threat exposure. Operating from US territory the military's relationship with the populace has improved, and local economies are benefiting from increased domestic spending. In turn, these improved relations have overcome the former estrangement of the military from society.

The Army will reestablish itself given time. Time though is a precious commodity the Army cannot afford to let slip by as the future beckons. The Army modernization strategy in fact lays out the road map for the force as it details how digitization will improve efficiencies; combat overmatch vice raw numbers will maintain US superiority; sustained research and development will develop leap-ahead technologies; recapitalizing the force will free critical resources to aid modernization; and integrating the AC and RC forces will improve readiness, and increase force projection capabilities.¹⁵⁷ The Army Investment Strategy reflects these priorities as it projects the evolution of the twenty-first century Army (See figure 13).

Army Strategy for Developing the Future Force

Army Investment Strategy

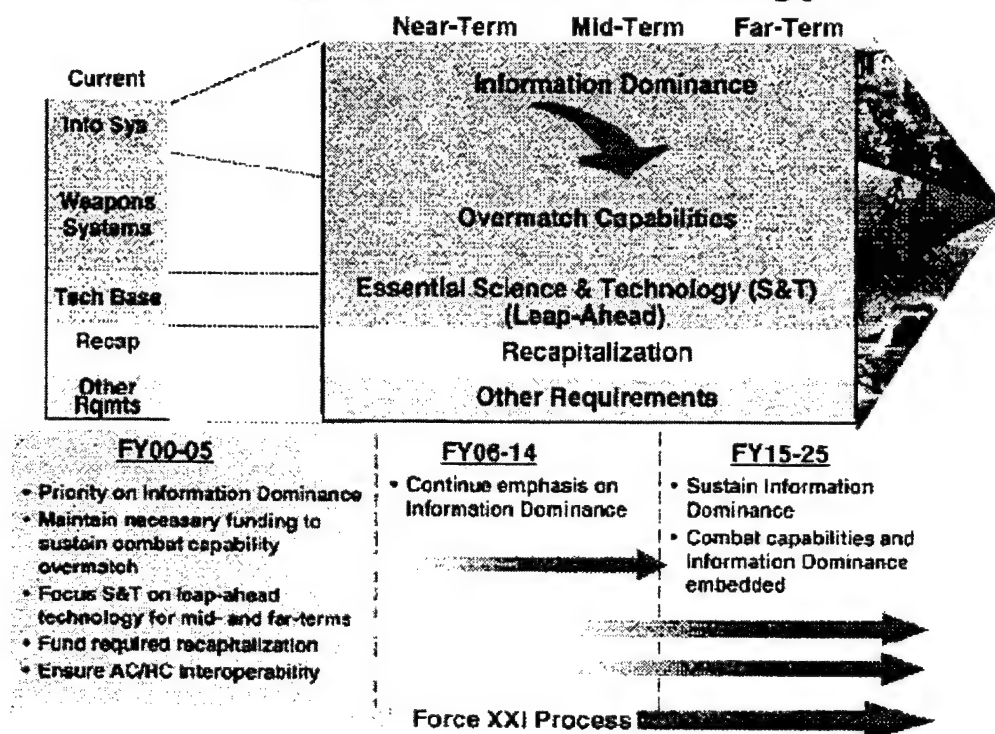


Figure 13. Source: *United States Army Posture Statement FY 00*, 43.

Doctrine Overhaul

Grounded in conventional wisdom, Wass De Czege and Echevarria, argue the strategic concept for land forces should rest upon three pillars: maintaining and shaping the peace through stability and support operations; building coalitions and alliances to respond to regional crises and containing conflict; and waging decisive campaigns to limit collateral damage and achieve durable peace.¹⁵⁸ In pursuing this strategy, the US in turn will be able to leverage revolutionary capabilities. Wass De Czege and Echevarria believe landpower will have unprecedented reach, control, and potential employment to aid decision makers.

Doctrine as described by the *Army Posture Statements* specifies how the Army fights, establishes the standards for how it trains, and details the procedures for maintaining equipment.¹⁵⁹ To maintain consistency across the force, doctrinal revisions should precede major system fielding or new organizational redesign. The Army battle labs contribute to the process and through spiral development's reduced development cycles and accelerated testing of new concepts, support rapid fielding of technology and complimentary doctrine to the force for validated concepts. Today eleven battle labs help keep Army doctrine current through focusing on functional areas supporting effective land combat power. The battle labs team with industry partners in continuing efforts to leverage state of the art technology for military applications.

Former Army CSA Gordon Sullivan launched the Force XXI initiative and clarified the purpose of technology for the twenty-first century force when he announced the Army's modernization plan in 1994. General Sullivan believed the focus of modernization should be to reduce American casualties on future battlefields by overmatching enemy capabilities through advantages in US technology.¹⁶⁰ According to General Sullivan, the purpose of technology was fivefold: first to project and sustain the CONUS-based force; second to protect the force and preserve freedom of action by developing weapon systems and technology to defeat high-tech threats; third to win the battlefield information war by identifying the disposition of enemy forces and staying within the adversary's decision cycle while denying the enemy like information; fourth to conduct precision strikes throughout the battlefield to destroy combat forces and logistical nodes in the enemy rear to influence the close fight; and lastly to dominate the maneuver battle by developing the capability to synchronize effects and simultaneously

destroy the enemy throughout the depth of the battlefield by emphasizing increased range and lethality.

The AAN concept is the larger approach to lead the Army into the 2025 era. Lieutenant General Rigby, deputy commander TRADOC, expects the insights learned during Strike Force and other service initiatives will be applied to future initiatives to demonstrate these advanced capabilities.¹⁶¹ The Army has already come far in realizing that relative combat power can be increased through leveraging developments in information technology to improve synchronization and lethality. However, what cannot be separated from these efforts and still needs to be demonstrated are corresponding improvements in deployability, survivability, and sustainability of the future force.¹⁶² Given the range of threats the US Army will face, from peacekeeping to declared war, Colonel Rodriguez, of the doctrine division at TRADOC, believes the Army of 2025 will be a hybrid of divisions, strike forces, and other types of units.¹⁶³ He sees an "Army part new, part revolutionary, and part carryover of Force XXI systems."¹⁶⁴

The new Army vision espoused by Secretary Caldera and CSA Shinseki acknowledges the challenges to world peace and emerging democracies. It also identifies how the US Army will adapt to forestall emerging threats, foreseeing a growing need for land forces in joint and combined operations to better support the US policy of global engagement. Caldera and Shinseki anticipate a continuation of the current range of missions, extending from peace operations to major theater wars, including conflicts with the possible use of WMD.¹⁶⁵ Their redirection for the force is returning the US Army to the first string, the initial lineup that America counts on for national defense. It became clear the new Army leadership understood the impact of their force realignment when

they declared, "the twenty-first century Army is the surest sign of America's commitment to accomplishing any mission that occurs on land."¹⁶⁶

The JEF concept revisited could be the Army's answer as it adjusts to realities of the age and increased joint and combined operations. Establishing interagency agreements and conducting periodic exercises and deployments should dismiss the arcane requirement of a one-year activation process, and provide an unmatched synergistic force, along the lines that FEMA operates supporting national emergencies. Regular contact among these agencies would promote efficiencies through improved coordination and established business practices, and should remove traditional barriers limiting participation. The Joint Training and Analysis Center (JTASC) located at JFCOM will provide the JEF an excellent training opportunity through in-depth scenario-driven training that places the interagency task force into a very complex simulated environment.¹⁶⁷ Every anticipated influence can be introduced into the scenario to give the JEF the opportunity to respond to situations likely to be faced during deployment. The net result of this enhanced interagency cooperation would be the JEF's ability to leverage organizational strengths in providing the nation its best means of addressing the full range of related NSS requirements.

Force Redesign

The logic of international relations that positioned Rome at the center of world affairs also compels the United States to remain engaged in the world. . . . America's ground forces will have to be prepared to perform the tasks Caesar assigned to his Legions--win wars, restore order, and preserve a stable and prosperous peace wherever direct American influence is required.¹⁶⁸

Colonel Douglas Macgregor, *Breaking the Phalanx*

Colonel Douglas Macgregor, a veteran cavalry officer with distinguished service during Desert Storm, recently proposed the US military take a novel approach to organizing for future defense requirements.¹⁶⁹ Well known for innovative thinking, his ideas met with strong opposition from the defense establishment and may have caused the culmination of an otherwise illustrious career. Colonel Macgregor believed the Roman legion was the inspiration for the future of American land power. He argued that current US Army force structure does not properly meet potential threats and proposed restructuring the corps and divisions into smaller, more responsive composite units similar to the Roman phalanx.¹⁷⁰ Further, Colonel Macgregor suggested a lighter, more responsive Army would take a more central role in US strategic thinking, with air and naval forces assuming supporting roles.

The *FY 00 Army Posture Statement* notes the service has taken a number of initiatives to improve force structure.¹⁷¹ The Total Army Analysis (TAA) process provides the overarching evaluation of the force and ensures the Army is employing its total strength in the most effective manner. Continuous evaluation enables validated experimentation to improve efficiencies in force structure. Other ongoing efforts strive to further integrate AC and RC components in the near term. Specifically, TAA 07, the

current Army-wide analysis effort, the Heavy Division Redesign, the ARNG Division Redesign, and the series of total Army integration initiatives reflect Army commitment to improve the force's ability to support the NMS and warfighting CINCs. The Army says TAA 07 will be the first of the periodic analyses to go beyond the requirement to fight two MTWs. Army leadership intends for this analysis to consider the wide range of requirements from domestic support operations and homeland defense to SSCO, asymmetric warfare, transnational threats, and conventional warfare.

Heavy division redesign, reflected in Division XXI efforts, leverages technology to improve combat power with reduced personnel requirements. The Army is leveraging digitization to reduce manning in armor, mechanized infantry, and artillery units. Enhanced situational awareness--situational understanding as it is developing into--allows maneuver forces to achieve positional advantage and synchronize effects with less threat exposure than conventional force structure. Increased efficiencies have caused the Army to reduce main battle systems (tanks, infantry fighting vehicles, and artillery systems) by 25 percent in each line battalion. Additional efficiencies in logistics reduce support personnel requirements, with total division strength reduced by roughly 12 percent over AOE numbers.¹⁷² Army leadership embedded RC soldiers and equipment into the new heavy division to demonstrate service commitment to the total force and strengthen unity in future warfighting. Division XXI incorporates a number of innovations including a Reserve component multiple launch rocket system (MLRS) battery and general support aviation company and a reconnaissance troop to each maneuver brigade.

ARNG Division Redesign was another effort at improving future force structure. TAA 05 in 1997 had identified a 72,000-soldier shortfall in available combat service (CS) and combat service support (CSS) forces, and the ARNG Division Redesign effort recommended the conversion of 48,000 personnel authorizations from the guard combat force structure to meet a portion of the CS and CSS requirements. The first phase of this conversion is projected to involve six maneuver brigades between FY 00 and FY 05, with the remaining conversion scheduled to be complete by fourth quarter FY 09.

Total Army integration initiatives demonstrate commitment of senior leadership to improve readiness force-wide. The Army to its credit took substantial efforts to mend rifts between the AC and RC as it prepared to start these bold initiatives. Relations between the National Guard and Army Reserve commanders with the Army Chief of Staff have consequently improved, as the total Army became united in purpose. This evolved into the Army's integrated approach for peacetime engagement and preparedness for war. Continuing integration is placing AC commanders in key RC command and staff billets, and RC commanders in AC units. Additionally, the Army created two integrated divisions under AC command with AC headquarters, comprised of RC enhanced separate brigades (ESB). The Army also maintains RC roundout brigades for AC divisions and is experimenting with using RC companies to replace AC light infantry companies as it continues to maintain flexible organizations to respond to emerging threats across the operational continuum.

Maintaining force flexibility will help the Army maintain its precarious balance between meeting combat requirements and peace operations. Current initiatives to improve warfighting capabilities from SSCO to high intensity conflict are exploring

innovative force structures and equipment that will also support operations on the lower end of the threat spectrum, including SASO. According to RAND, the Army has several approaches to improve force agility, including: greater modularity, expanded functionality, reorganization, and outsourcing.¹⁷³

Modularity as defined involves increasing unit autonomy by replacing specialized units with composite forces. Rather than stepping qualifications down, this concept would round out capabilities from each of the BOS. The intent was for tables of organization and equipment (TOE) to be rewritten to create integrated support elements down to company level. Unit commanders would accordingly enjoy increased capabilities and greater flexibility, while stay-behind forces would be able to continue operations without disrupting unit integrity.

Expanded functionality would create multirole units, with soldiers cross-trained in functions similar to their primary task, such as petroleum pipeline units filling requirements of lower density water distribution units. RAND notes units with diverse skills are more prevalent in smaller foreign armies and include engineer and communication units. This approach would of course recognize that US infantry forces are roughly organized this way as all infantrymen are versed in combined arms operations, unconventional, and low and high intensity conflict. Admittedly, capabilities differ, as infantrymen by choice tend to specialize in light or heavy operations.

Reorganizing assets converts low demand units into forces in higher demand. The ARNG Division Redesign effort for example falls within this category as the Army required bill payers to fill critical CS/CSS shortages. In the process maneuver brigades will be converted over a ten-year period to CS and CSS elements.

The last approach under development by the Army involves outsourcing operations. It is a rare deployment today where contractors, such as Brown and Root, are not establishing base infrastructure support, and otherwise performing missions previously relegated to uniformed military. Contractors now perform basic maintenance and subsistence functions in support of troop deployments worldwide. Sister services, agencies, host nations, and allies are increasingly augmenting or substituting for low-density Army assets. The Air Force Red Horse and Navy Seabee units have saved the day in recent deployments, including Bosnia where they provided construction support for the Army.

These various efforts show the Army is embracing novel approaches to supporting force deployments, and increasing capabilities while attempting to reduce OPTEMPO. Extensive predeployment and postdeployment training will facilitate unit transition into peace operations and back to a combat posture as forces increasingly perform wide-ranging missions. As RAND notes, the political mandate for increased involvement in peace operations has been limited, though Secretary of State Albright continues to call on the military to improve domestic conditions worldwide. "What good is an army if we don't use it?" as expressed by Secretary Albright typifies the political environment that finds the US Army increasingly involved in international affairs.¹⁷⁴ In adapting the force to more ably meet the range of missions being levied, the Army is making prudent decisions to broaden the relevancy of US land forces in the face of growing commitments.

Further recognizing the importance of Reserve support forces the Army implemented a contingency force pool (CFP) for support units needed early in major

contingencies. According to RAND, the CFP forces consist of 77,600 active and 113,400 reserve soldiers, who are intended to support deployed combat forces.¹⁷⁵ The study further indicated that 7,000 RC personnel are identified to deploy within 30 days to support a three-division contingency force deployment, with more than 108,000 earmarked to deploy in support of a five-division force within 75 days. Using these figures to represent projected commitment to one MTW, the mix of AC and RC forces would be able to support combat requirements.

Though future conflict at or exceeding these levels is unlikely, the Army has accepted that it cannot support itself in conflict on a larger scale or extending over multiple theaters simultaneously without considerable warning. RAND has conducted extensive research for the Army in support of TAA efforts to develop required force structure. FORSCOM has also benefited from RAND analysis of its zero base methodology to define minimum contingency force packages.¹⁷⁶ These and other RAND research indicate the Army today would have to draw from the 188,900 RC general war category forces (manned and trained at lower readiness given reduced priorities) for conflict exceeding the four to five division MTW. Additionally, though the Army's goal is to have ESBs ready for deployment within 90 days of mobilization, previous research shows it is more likely to take 100 to 130 days.¹⁷⁷

¹ Secretary of Defense Cohen, *Report of the Quadrennial Defense Review* (Washington, DC: Government Printing Office, May 1997), 3.

² Chilcoat, 6.

³ Office of Chief of Staff, *Army Vision 2010* (Washington, DC: Department of the Army, 1996), 5.

⁴ John Smith, "Avoiding Agincourt-Restructuring Command and Control for the 21st Century" (Master's thesis, Fort Leavenworth, KS: US Army Command and General Staff College, May 1998), 15.

⁵ John Shalikashvili, *National Military Strategy* (Washington, DC: JCS, 1997), 8.

⁶ Ibid.

⁷ Joint Chiefs of Staff, Joint Pub 3-07, *Joint Doctrine for Military Operations Other Than War* (Washington, DC: JCS, 16 June 1995), 1-3.

⁸ Cohen, remarks as delivered by SECDEF at Joint Forces Command Activation Ceremony, Norfolk, VA, 7 October 1999.

⁹ Congress, House Committee on Armed Services, Military Readiness: Hearing before the Committee on Armed Services, 106th Cong., 1st sess., 22 March 1999; available from <http://www.house.gov/hasc/testimony/106thcongress/99-04-03gehman/schwarz>; Internet; accessed 10 February 2000.

¹⁰ Army Chief of Staff, *United States Army Posture Statement FY00* (Washington, DC: Department of the Army, February 1999), x.

¹¹ Paret, 419.

¹² Jonathan House, *Toward Combined Arms Warfare: A Survey of 20th Century Tactics, Doctrine, and Organization* (Fort Leavenworth, KS: Combat Studies Institute, 1985), 164.

¹³ Sun Tzu, *The Art of War*, ed. and trans. by Roger Ames (NY: Ballantine Books, 1993), 28.

¹⁴ Jordan, Taylor, and Mazarr, 87.

¹⁵ Cohen, USJFCOM Activation Ceremony, 7 October 1999.

¹⁶ Addington, 134.

¹⁷ Ibid., 176.

¹⁸ House.

¹⁹ Ibid., 175.

²⁰ Ibid.

²¹ Jordan, Taylor, and Mazarr, 66.

²² Ibid., 84.

²³ William Clinton, *A National Security Strategy for a New Century* (Washington, DC: Government Printing Office, 1998), 5.

²⁴ Cohen, "Preparing for a Grave New World," *The Washington Post*, 26 July 1999, 1.

²⁵ Office of Chief of Staff, *Army Vision 2010* (Washington, DC: Department of the Army, 1996), 6.

²⁶ Katherine Peters, "Losing Ground," *Government Executive*, August 1999, 2.

²⁷ Jordan, Taylor, and Mazarr, 62.

²⁸ William Durch, *UN Peacekeeping, American Policy, and the Uncivil Wars of the 1990s* (NY: St. Martin's Press, December 1996), 24.

²⁹ Ibid., 52.

³⁰ Ibid., 54.

³¹ Bradley Graham and Dana Priest, "No Way to Fight a War," *Washington Post*, 6 June 1999, 20.

³² Offley, A9.

³³ Gordon Sullivan, quoted in John Romjue, *American Army Doctrine for the Post-Cold War Era* (Fort Monroe, VA: TRADOC History Office, 1996), 42.

³⁴ Jonathan Landay, "Battle Over the Future of America's Army," *Christian Science Monitor*, June 1999, 2.

³⁵ Ibid.

³⁶ Sullivan, *The Army in the Information Age* (US Army War College: Strategic Studies Institute, March 1995), 2.

³⁷ Ibid.

³⁸ White House FY 2000 Defense Budget statement entitled, *Supporting the World's Strongest Military Force*; available from <http://www.whitehouse.gov/wh/eop/op/budget2000/defense.html>; Internet; accessed 12 February 2000.

³⁹ Caldera, Army Press Release, 12 Oct 1999.

⁴⁰ Shalikashvili, 2.

⁴¹ Ibid., 3.

⁴² Ricks, A8.

⁴³ Peters.

⁴⁴ John Hillen, quoted in *Government Executive*, August 1999, 3.

⁴⁵ Connie Dickey, "Caldera Says Change is in the Army's Future," *Army Link News*, 12 October 1999, 2.

⁴⁶ Ibid.

⁴⁷ Joint Chiefs of Staff, Joint Publication 3-0, *Doctrine for Joint Operations*, (Washington, DC: JCS, 1996), 1-5.

⁴⁸ Congress, House Committee on Armed Services, Military Readiness: Hearing before the Committee on Armed Services, 106th Cong., 1st sess., 22 March 1999; available from <http://www.house.gov/hasc/testimony/106thcongress/99-03-05zinni>; Internet; accessed 10 February 2000.

⁴⁹ Congress, House Committee on Armed Services, Military Readiness: Hearing before the Committee on Armed Services, 106th Cong., 1st sess., 22 March 1999; available from <http://www.house.gov/hasc/testimony/106thcongress/99-03-04clark>; Internet; accessed 10 February 2000.

⁵⁰ Cohen, USJFCOM Activation Ceremony, 7 Oct 1999.

⁵¹ Congress, House Committee on Armed Services, Military Readiness: Hearing before the Committee on Armed Services, 106th Cong., 1st sess., 22 March 1999; available from <http://www.house.gov/hasc/testimony/106thcongress/99-03-04gehman>; Internet; accessed 10 February 2000.

⁵² Congress, House Committee on Armed Services, Military Readiness: Hearing before the Committee on Armed Services, 106th Cong., 1st sess., 22 March 1999; available from <http://www.house.gov/hasc/testimony/106thcongress/99-03-04blair>; Internet; accessed 10 February 2000.

⁵³ Ibid.

⁵⁴ Wass de Czege and Echevarria, 63.

⁵⁵ Shanahan, 13.

⁵⁶ Ibid., 14.

⁵⁷ Shinseki, Army Press Release (Washington, DC: Pentagon, accessed 15 October 1999); available from <http://www.army.mil>; Internet.

⁵⁸ Graham, 3.

⁵⁹ Gilmore.

⁶⁰ Anne Chapman, Carol Lilly, John Romjue, and Susan Canedy, "Prepare the Army for War: A Historical Overview of TRADOC 1973-1998," TRADOC Historical Study Series, July 1998, 48.

⁶¹ Reinwald, 22.

⁶² Record, 1.

⁶³ Record. *Ready for What and Modernized Against Whom?* (Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, April 1995), 6.

⁶⁴ Ibid., 8.

⁶⁵ Ambassador Armitage, guest lecture remarks to the US Army War College, Carlisle Barracks, PA, May 1998.

⁶⁶ Mazarr, 307.

⁶⁷ Shanahan.

⁶⁸ Congress, House Committee on Armed Services, Military Readiness: Hearing before the Committee on Armed Services, 106th Cong., 1st sess., 22 March 1999; available from <http://www.house.gov/hasc/testimony/106thcongress/99-03-04blair>; Internet; accessed 10 February 2000.

⁶⁹ Jason Sherman, "Quick Time: The Army's New Strike Force Concept Aims to Redefine Rapid Reaction," *Armed Forces Journal International*, May 1999, 16.

⁷⁰ Ibid.

⁷¹ Shinseki, Army Press release, 12 October 1999.

⁷² Office of Chief of Staff, *Army Vision 2010*, 8.

⁷³ Honorable Charles Cragin, Principal Deputy Assistant Secretary of Defense for Reserve Affairs, Reserve Component CGSC graduation speaker, Fort Leavenworth, KS, 17 December 1999.

⁷⁴ Shinseki, Army Press Release, October 1999.

⁷⁵ Office of Chief of Staff, *United States Army Posture Statement FY00, America's Army – Assuring Readiness for Today and for the 21st Century* (Washington, DC: Department of the Army, 1999), 22.

⁷⁶ Congress, House Committee on Armed Services, Military Readiness: Hearing before the Committee on Armed Services, 106th Cong., 1st sess., 22 March 1999; available from <http://www.house.gov/hasc/testimony/106thcongress/99-03-22abrams>; Internet; accessed 10 February 2000.

⁷⁷ Congress, House Committee on Armed Services, Military Readiness: Hearing before the Committee on Armed Services, 106th Cong., 1st sess., 22 March 1999; available from <http://www.house.gov/hasc/testimony/106thcongress/99-03-22gehman>; Internet; accessed 10 February 2000.

⁷⁸ Jay Johnson, Navy Press Release (Washington, DC: Office of Chief of Naval Operations, 7 January 2000).

⁷⁹ Office Chief of Staff, *United States Army Posture Statement FY00*, 18.

⁸⁰ "The Army Posture Statement: Not their Fathers' Army," *Army Logistician*, Jul-Aug 1998, 16.

⁸¹ Shanahan.

⁸² Congress, House Committee on Armed Services, Military Readiness: Hearing before the Committee on Armed Services, 106th Cong., 1st sess., 22 March 1999; available from <http://www.house.gov/hasc/testimony/106thcongress/99-03-04blair>; Internet; accessed 10 February 2000.

⁸³ TRADOC briefing to VCSA on JCF AWE, 4 February 2000.

⁸⁴ Toffler and Toffler.

⁸⁵ Wass de Czege and Echevarria.

⁸⁶ Graham and Priest, 20.

⁸⁷ Sherman.

⁸⁸ Ibid., 2.

⁸⁹ Peters

⁹⁰ Shinseki, Army Press Release, 12 October 1999.

⁹¹ John Gordon and Peter Wilson, "The Case for Medium-Weight Army Forces," *Army*, December 1999, 33.

⁹² Shinseki, quoted in "Washington Report: Gen Shinseki Sets the Course for a Full-Spectrum Army," *Army*, November 1999, 7.

⁹³ Sean Naylor, "Gen Shinseki: Army Isn't A Threat To Marines' Role," *Army Times*, 15 November 1999, 10.

⁹⁴ Shinseki, "Washington Report," *Army*, November 1999, 7.

⁹⁵ *Army Posture Statement FY00*.

⁹⁶ Ibid.

⁹⁷ Ibid.

⁹⁸ Ibid.

⁹⁹ Ibid.

¹⁰⁰ Ibid.

¹⁰¹ Ibid.

¹⁰² Lieutenant Colonel Billy Hadden, "Medium-weight Brigade O & O Plan." interview by author. Fort Leavenworth, KS: CAC, October 1999-March 2000.

¹⁰³ Ibid.

¹⁰⁴ *Army Posture Statement FY 99*.

¹⁰⁵ Wass de Czege and Echeverria.

¹⁰⁶ Sullivan, in Romjue: *American Army Doctrine*, 45.

¹⁰⁷ Shanahan.

¹⁰⁸ Congress, House Committee on Armed Services, Military Readiness: Hearing before the Committee on Armed Services, 106th Cong., 1st sess., 22 March 1999; available from <http://www.house.gov/hasc/testimony/106thcongress/99-03-04>; Internet; accessed 10 February 2000.

¹⁰⁹ Ibid.

¹¹⁰ *United States Army Posture Statement FY00*, 25.

¹¹¹ "Not Their Fathers' Army," 16.

¹¹² Congress, House Committee on Armed Services, Military Readiness: Hearing before the Committee on Armed Services, 106th Cong., 1st sess., 22 March 1999; available from <http://www.house.gov/hasc/testimony/106thcongress/99-03-20>; Internet; accessed 10 February 2000.

¹¹³ Congress, House Committee on Armed Services, Military Readiness: Hearing before the Committee on Armed Services, 106th Cong., 1st sess., 5 April 1999; available from <http://www.house.gov/hasc/testimony/106thcongress/99-04-22tilelli>; Internet; accessed 10 February 2000.

¹¹⁴ Congress, House Committee on Armed Services, Military Readiness: Hearing before the Committee on Armed Services, 106th Cong., 1st sess., 22 March 1999; available from <http://www.house.gov/hasc/testimony/106thcongress/99-03-04schwarz>; Internet; accessed 10 February 2000.

¹¹⁵ Congress, House Committee on Armed Services, Military Readiness: Hearing before the Committee on Armed Services, 106th Cong., 1st sess., 5 April 1999; available from <http://www.house.gov/hasc/testimony/106thcongress/99-04-05>; Internet; accessed 10 February 2000.

¹¹⁶ Congress, House Committee on Armed Services, Military Readiness: Hearing before the Committee on Armed Services, 106th Cong., 1st sess., 5 April 1999; available from <http://www.house.gov/hasc/testimony/106thcongress/99-04-05>; Internet; accessed 10 February 2000.

¹¹⁷ Record, 3.

¹¹⁸ Wass de Czege and Echeverria, 64.

¹¹⁹ James Dubik, "Creating Combat Power for the 21st Century," *The Land Warfare Papers* (Washington, DC: AUSA, October 1996), 8.

¹²⁰ Record, *Ready for What?*, 6.

¹²¹ Peters.

¹²² Ibid.

¹²³ Sullivan, "Moving into the 21st Century: America's Army and Modernization," *Military Review* 73, no. 7 (July 1993): 3.

¹²⁴ "Not Your Father's Army," *Newsweek*, 22 November 1999, 48.

¹²⁵ Sherman.

¹²⁶ Peters.

¹²⁷ Record, *The Creeping Irrelevance*, 18.

¹²⁸ Peters.

¹²⁹ Ibid.

¹³⁰ Ibid.

¹³¹ Henley.

¹³² Institute for National Strategic Studies, "Transforming Defense, National Security in the 21st Century," *Report of the National Defense Panel* (Washington, DC: Government Printing Office, December 1997), 23.

¹³³ Ibid.

¹³⁴ Ibid., 45.

¹³⁵ Shahanan.

¹³⁶ Ibid.

¹³⁷ Carlile.

¹³⁸ Ibid.

¹³⁹ Congress, House Committee on Armed Services, Military Readiness: Hearing before the Committee on Armed Services, 106th Cong., 1st sess., 22 March 1999; available from <http://www.house.gov/hasc/testimony/106thcongress/99-03-11>; Internet; accessed 10 February 2000.

¹⁴⁰ Peters.

¹⁴¹ Zanini, as quoted by Peters.

¹⁴² Ibid.

¹⁴³ Graham.

¹⁴⁴ Ibid.

¹⁴⁵ "Not Their Father's Army," 11.

¹⁴⁶ "Transforming Defense, 79.

¹⁴⁷ Walter Lippmann, as quoted by the US National Security Commission for the 21st Century (Washington, DC: National Strategic Studies Institute, 15 September 1999, accessed 10 January 2000), available from <http://www.nssg.gov>; Internet.

¹⁴⁸ Kaplan.

¹⁴⁹ Ibid.

¹⁵⁰ General Charles Krulak, *USMC Posture Statement* (Quantico, VA: Headquarters, US Marine Corps, Marine Corps Printing Office, 1997), 10.

¹⁵¹ Wass de Czege and Echevarria, 62.

¹⁵² *Army Posture Statement FY00*, February 1999, 37.

¹⁵³ *Phase I Report on the Emerging Global Security Environment for the First Quarter of the 21st Century*, US Commission for National Security in the Twenty-first Century (Washington, DC: National Strategic Studies Institute, 15 September 1999, accessed 10 January 2000), available from <http://www.nssg.gov>; Internet.

¹⁵⁴ Ibid., 7.

¹⁵⁵ Derived from the *Report of the Quadrennial Defense Review*, May 1997.

¹⁵⁶ John Arquilla and David Ronfeldt, *In Athena's Camp: Preparing for Conflict in the Information Age* (Washington, DC: RAND, 1998).

¹⁵⁷ *Army Posture Statement FY00*, 41.

¹⁵⁸ Ibid.

¹⁵⁹ *Army Posture Statement FY99*, 25.

¹⁶⁰ Romjue, 37.

¹⁶¹ Sherman, 16.

¹⁶² Ibid., 17.

¹⁶³ Ibid.

¹⁶⁴ Peters, 4.

¹⁶⁵ Army Press Release, November 1999.

¹⁶⁶ Ibid.

¹⁶⁷ Lieutenant Colonel Timothy Wolfe, JTASC, USJFCOM, interview by author, MacDill AFB: Tactical Communications Conference, January 1999.

¹⁶⁸ Douglas Macgregor, *Breaking the Phalanx: A New Design for Landpower in the 21st Century*, 1997, 4.

¹⁶⁹ Ibid., 9.

¹⁷⁰ Ibid.

¹⁷¹ *Army Posture Statement FY00*, 47.

¹⁷² Ibid., 49.

¹⁷³ Jennifer Morrison Taw, David Persselin, and Maren Leed, "Meeting Peace Operations' Requirements While Maintaining MTW Readiness" (Washington, DC: RAND, 1998), 25.

¹⁷⁴ Secretary Albright comments to the national press on the expanded role of the military in international affairs, Washington, DC, November 1999.

¹⁷⁵ Ronald Sorter, *Army Active/Reserve Mix, Force Planning for Major Regional Contingencies* (Washington, DC: Rand, 1995), xii.

¹⁷⁶ Ibid., 4.

¹⁷⁷ Ibid., xv.

CHAPTER 5

CONCLUSION

Those who would seek “silver bullets” must first acknowledge that land warfare under Napoleon, Grant, Pershing, Patton, Ridgway, Westmoreland, Thurman, Stiner, Schwarzkopf, Hoar, and Powell is surprisingly similar. War is a matter of heart and will first; weaponry and technology second. Thus, while strategists must understand the role that technology plays in changing how land combat will be conducted in the 21st century, so too must they acknowledge the ways in which the nature of warfare remains constant.¹

Colonel James Dubik, *Land Warfare Papers*

In conducting this analysis of the US Army and its relevance for the future, the thesis initially presented historical discussion of similar eras, noting the impact of world developments and changing national security strategies on the formulation of operational and tactical strategies. The relevance of military forces in supporting US national policies has varied greatly in the nation’s history, relative to financial and domestic priorities.² In determining how best to support the roles assigned by the executive and legislative branches, the US Army has through history overhauled its doctrine, training, and force structure accordingly.³

Removing barriers to relevancy, the Army is most importantly solving its identity crisis, by instilling unity of purpose across the force. The new Army leadership is streamlining the development of the requisite capabilities for the full-spectrum force required to support the national security objectives. Secretary Caldera’s goal of seamless force readiness service-wide will reduce the heightened OPTEMPO that finds selected units responding to the 300 percent increase in missions since the Cold War.⁴

Army efforts demonstrate service commitment to answering the call of the warfighting CINCs for more adaptable, quickly deployable forces. Already committing \$3.5 billion to strategic mobility projects between FY 98 and FY 03, the Army is improving deployment infrastructure, expanding the pre-positioned afloat equipment stocks, and upgrading containerized shipping.⁵ Additionally, reducing opportunity costs by taking advantage of the peace dividend, the Army expects to save over \$10 billion between FY 98 and FY 03 through base realignments, infrastructure reduction, and implementing DoD reform initiatives.⁶ Further savings by cutting back outdated programs, such as the Comanche and Crusader programs, and transferring some of the Abrams tank fleet to the reserves could save upwards of \$50 billion.⁷

Altogether, the Army has within its own means the ability to fund its leapfrog effort toward fielding a relevant twenty-first century force. In suggesting a way ahead, the thesis tied together developments influencing changes in strategy and associated doctrinal and force structure revisions, with the newly established unity of purpose focusing Army efforts toward change. When noting that preserving US supremacy on the battlefield is directly linked to world stability, Jeffrey Record reflects strategic consensus.⁸ More importantly, his premise that this very supremacy encourages would-be adversaries to look for cheap alternatives should encourage senior leadership to reapportion resources to speed US preparedness for an uncertain future and to allow the country and its friends to enjoy the peace dividend they have earned. The US Army has an unprecedented opportunity to help America lead the world in promoting freedom, economic prosperity, and stability on the dawn of a new millennium. It must not fail the

country and world democracy in this endeavor to recognize and address the future force requirement.

Admitting its responsibility to correct current shortcomings in meeting CINC requirements, the Army is striving to satisfy twenty-first century requirements for effective strategic responsiveness, while acknowledging Col Dubik's argument that technology alone does not provide the solution to warfare.⁹ Combat power depends on the right mix of technology with doctrine, training, leadership, organization, materiel, and soldiers. This has focused immediate Army efforts toward providing rapidly deployable, highly integrated, combined arms units to overmatch enemy capabilities. Exploiting the information age and combining the advantages of light and heavy forces, the Army intends to provide the warfighting CINCs a new option for decisive contingency response. In producing the optimum organization for the interim brigade, the Army believes it must balance between achieving strategic responsiveness and battlespace dominance.¹⁰ It recognizes it cannot sacrifice one for the other without compromising the brigade's utility and relevance. Additionally, the interim force must provide balanced utility across the spectrum to support brigade mission analysis. Although the force is focused for early entry SSCO, it may also be required to function as a security force in SASO to international efforts. Responding to the higher extreme of missions, the force must remain prepared, with augmentation if necessary, to fight as part of a larger commitment of US forces in major theater war.¹¹

Stressing the interim force is intended to fight as a combat brigade, the Army is balancing tradeoffs in armament to achieve the deployability currently lacking in today's heavy force. Admitting the brigade is not designed to conduct forced entry, the Army

projects it will fill the critical gap now existing between the early entry forces and follow-on armor forces. The service believes this force will answer the joint warfighter's call for improved ground force capabilities. The Marine Corps has validated Army efforts, admitting the medium-weight forces would plug the twelve-day hole between arrival of the battalion-sized MEU and its follow-on regimental sized MEF.¹²

Oriented on SSCO and acknowledging future demographic predictions the medium-weight focus of operating in urban or dense terrain demands an appreciable dismounted assault capability. To operate across the mission continuum, the Army must therefore dramatically reduce force inhibitors. The brigade must reduce its sustainment requirements below those of a comparable heavy force; it must minimize its personnel and logistics footprints in theater; the force must exploit commonality of vehicular platforms; and it must maximize reach-back capabilities to further reduce organic requirements. Though traditional combined arms task forces operate at battalion level and higher, operational analysis for the medium-weight brigade indicates force effectiveness is enhanced with integrated combined arms down to company teams.¹³ Leveraging continuing experimentation, the brigade is expected to routinely incorporate technical insertions during its life-cycle role as the incubator for the Army's transformation strategy. Army efforts developing a tailorable force design for operations in diverse environments, including "hooks" for rapid integration of additional enabling capabilities for peace operations and MTW, will provide the adaptable force US national security demands.¹⁴

Consistent with the emerging trend in US national security policy that finds the military increasingly involved worldwide, American landpower will likely bear the brunt

of maintaining stability in the future. Either in concert with US allies or alone, the Army will have an indispensable role in future joint expeditionary forces, as current advanced warfighting experiments demonstrate. By developing an adaptable deployable force, capable of overmatching future threats, the Army will secure its place in the nation's arsenal. Developing its future force mindful of strategic lift limitations, the service is reestablishing its relevancy in support of future national and theater objectives.

¹ Dubik, *Land Warfare Papers*, 7.

² Jordan, Taylor, and Mazarr, 69.

³ Romjue, 32.

⁴ "Not Their Father's Army," 16.

⁵ Ibid., 17.

⁶ Ibid.

⁷ Graham, 3.

⁸ Record, "Operation Allied Force: Yet Another Wake-up Call for the Army?" *Parameters* 29, no. 2 (winter 1999-2000): 22.

⁹ Dubik, "Creating Combat Power," 12.

¹⁰ Hadden.

¹¹ Ibid.

¹² Marine Commandant General Jones, quoted in "Medium-weight brigades: Army's part of joint force," *Army Times*, 3 November 1999, 9.

¹³ Hadden.

¹⁴ Ibid.

BIBLIOGRAPHY

Books

- Addington, Larry. *The Patterns of War Since the Eighteenth Century*. Bloomington, IN: Indiana University Press, 1994.
- Arquilla, John and David Ronfeldt. *In Athena's Camp: Preparing for Conflict in the Information Age*. Washington, DC: RAND, 1998.
- Ballard, Richard. "U.S. Power Projection Capability and Rear-Area Security." *Land Warfare Papers*. Washington, DC: AUSA, September 1996.
- Brodie, Bernard. "Technology, Politics, and Strategy." As quoted in *American Security Policy*. Baltimore, MD: John Hopkins University Press, 1999.
- Chapman, Anne, Carol Lilly, John Romjue, and Susan Canedy. "Prepare the Army for War: A Historical Overview of TRADOC 1973-1998." *TRADOC Historical Series*. Fort Monroe, VA: TRADOC History Office, July 1998.
- Chilcoat, Richard. *Strategic Art: The New Discipline for 21st Century Leaders*. Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, 10 October 1995.
- Clausewitz, Carl von. Edited and Translated by Michael Howard and Peter Paret. *On War*, Princeton, NJ: Princeton University Press, 1984.
- Dubik, James. "Creating Combat Power for the 21st Century." *Land Warfare Papers*. Washington, DC: AUSA, October 1996.
- Durch, William. *UN Peacekeeping, American Policy, and the Uncivil Wars of The 1990s*. NY: St. Martin's Press, December 1996.
- Epstein, Robert. "Patterns of Change and Continuity in Nineteenth-Century Warfare." *Supplemental Readings on the Evolution of Modern Warfare*. Fort Leavenworth, KS: Combat Studies Institute, 1992.
- Handel, Michael. *Masters of War: Sun Tzu, Clausewitz, and Jomini*. London, England, Frank Cass Publishing, 1992.
- House, Jonathan. *Toward Combined Arms Warfare: A Survey of 20th Century Tactics, Doctrine, and Organization*. Fort Leavenworth, KS: Combat Studies Institute, 1985.

- Howard, Michael. "Military Science in an Age of Peace." *RUSI, Journal of the United Services Institute for Defense Studies*, March 1974. Cited in *The Evolution of Modern Warfare: Book of Readings*, Fort Leavenworth, KS: Combat Studies Institute, 1995, 45.
- Jablonsky, David. *Why is Strategy Difficult?* Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, June 1992.
- Johnsen, William. *Force Planning Considerations for Army XXI*. Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, January 1998.
- _____. *Redefining Land Power for the 21st Century*. Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, May 1998.
- _____. *Future Roles of US Military Power and Their Implications*. Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, April 1997.
- Jordan, Amos, William Taylor, and Michael Mazarr. *American National Security*. Baltimore, MD: John Hopkins University Press, 1999.
- Macgregor, Douglas. "Breaking the Phalanx." Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, 1996.
- Mazarr, Michael. "Chaos Theory and US Military Strategy: A 'Leapfrog' Strategy for US Defense Policy." *Complexity, Global Politics, and National Security*, June 1997. Ed. David Alberts and Thomas Czerwinski. Washington, DC: National Defense University Press.
- Mendel, William, and Graham Turbiville. *The CINCs' Strategies: The Combatant Command Process*. Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, December 1997.
- Millet, Allan. "Semper Paratus: The History of the United States Marine Corps." In *The Evolution of Modern Warfare Book of Readings*. Fort Leavenworth, KS: Combat Studies Institute, 1999.
- Morrison Taw, David Persselin, and Maren Leed. *Meeting Peace Operations' Requirements While Maintaining MTW Readiness*. Washington, DC: RAND, 1998.
- Paret, Peter. *Makers of Modern Strategy*. Princeton, NJ: Princeton University Press, 1986.
- Record, Jeffrey. *Ready for What and Modernized Against Whom?* Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, April 1995.

- _____. *The Creeping Irrelevance of US Force Planning*. Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, May 1998.
- Romjue, John. *American Army Doctrine for the Post-Cold War*. Fort Monroe, VA: TRADOC Military History Office, September 1996.
- Sorter, Ronald. *Army Active/Reserve Mix: Force Planning for Major Regional Contingencies*. Washington, DC: RAND, 1995.
- Stanley, Elizabeth. *Evolutionary Technology in the Current Revolution in Military Affairs*. Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, March 1998.
- Sullivan, Gordon, and Anthony Coroalles. *The Army in the Information Age*. Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, March 1995.
- Sullivan, Gordon, and James Dubik. *War in the Information Age*. US Army War College: Strategic Studies Institute, June 1994.
- _____. *Land Warfare in the 21st Century*. Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, February 1993.
- Taw, Jennifer Morrison, David Persselin, and Maren Leed. "Meeting Peace Operations' Requirements While Maintaining MTW Readiness." Washington, DC: RAND, 1998.
- Tilford, Earl. *Halt Phase Strategy: New Wine in Old Skins*. Carlisle Barracks, PA: US Army War College, Strategic Studies Institute, July 1998.
- Toffler, Alvin, and Heidi Toffler. *War and Anti-War*. Boston: Little, Brown, 1993.
- Tzu, Sun. *This Kind of War*. Edited and Translated by Roger Ames. NY: Ballantine Books, 1993.
- Ullman, Harlan, and James Wade Jr. *Shock and Awe, Achieving Rapid Dominance*. Washington, DC: National University Press, November 1996.
- Watts, Barry. "Clausewitzian Friction and Future War," *McNair Paper 52*. Washington, DC: Institute for National Strategic Studies, October 1996.
- Yates, Lawrence. "The USMC Between the Wars." *The Evolution of Modern Warfare Book of Readings*. Fort Leavenworth, KS: Combat Studies Institute, 1999.

Periodicals

- Barry, John. "The 21st Century Battle Plan." *Newsweek*, 1 January 2000, 5.
- Barry, John and Evan Thomas. "Not Your Father's Army." *Newsweek*, 22 November 1999, 12.
- Cheney, Steven. "The General's Folly." *Foreign Affairs*, January/February 1998, 23.
- Dickey, Connie. "Caldera Says Change is in the Army's Future." *ArmyLink News*, 12 October 1999, 2.
- Gilmore, Gerry. "Army to Develop Future Force Now, Says Shinseki." *Army Link News*, 24 November 1999, 3.
- Gordon, John and Peter Wilson. "The Case for Medium-weight Forces." *Army*, December 1999, 13.
- Henley, Lonnie. "The RMA After Next." *Parameters* 29, no. 2, (winter 1999): 32.
- Kaplan, Robert. "The Coming Anarchy." *The Atlantic Monthly* 273, no.2, (February 1994): 17.
- Landay, Jonathan. "Battle Over the Future of America's Army." *Christian Science Monitor*, June 1999, 11.
- Laurenzo, Ron. "Army May Accelerate Fielding of Medium Force." *Defense Week*. 20 September 1999, 14.
- Naylor, Sean. "EU Forms 60,000 Strong Force." *Newsweek*, 10 January 2000, 21.
- Peters, Katherine. "Losing Ground." *Government Executive*, August 1999, 7.
- Rogers, Bernard. "Determining National Strategy." *Army*, December 1999, 5.
- Sherman, Jason. "Quick Time: The Army's New Strike Force Concept Aims to Redefine Rapid Reaction." *Armed Forces Journal International*, May 1999, 22.
- Stearman, William, and Tracy Ralphs. "Medium-weight brigades: Army's part of joint force." *Army Times*. 3 November 1999, 10.
- Sullivan, Gordon. "Moving into the 21st Century: America's Army and Modernization." *Military Review* 73, no.7 (July 1993): 34.
- Tilford, Earl. "Operation Allied Force and the Role of Air Power." *Parameters* 29, no. 2.

Wass de Czege, Huba, and Antulio Echevarria, II. "Landpower and Future Strategy: Insights from the Army after Next." *Joint Forces Quarterly* 21 (spring 1999): 63.

Newspapers

"Europe's Defense Ambitions," *Wall Street Journal*. 31 January 2000, 7.

Graham, Bradley. "For the Tank, A New Tread of Thought." *Washington Post*, 6 November 1999, 11.

Graham, Bradley and Dana Priest. "No Way to Fight a War: Hard Lessons on Air Power, Coalitions." *Washington Post*, 6 June 1999, 9.

Offley, Ed. "Reshaped Fort Lewis Brigades Will Take Aim at Quick Global Response." *Seattle Post-Intelligencer*, 10 November 1999, 14.

Ricks, Thomas. "Ground Zero, Military Must Change for the 21st Century: Question is How?" *Wall Street Journal*, 12 November 1999, 9.

"The Army's New Strategy." *REUTERS* News Article. 30 November 1999, 8.

Government Documents

Caldera, Louis, and Eric Shinseki. *The Army Vision: Soldiers on Point for the Nation ... Persuasive in Peace, Invincible in War*. Washington, DC: Army Printing Office, October 1999.

Clinton, William. *A National Security Strategy for a New Century*. Washington, DC: Government Printing Office October 1998.

Cohen, William. *Report of the Quadrennial Defense Review*. Washington, DC: Government Printing Office, May 1997.

GAO. "Force Structure: Army's Support Requirements Process Lacks Valid and Consistent Data." *GAO Report*. Washington, DC: Government Printing Office, January 1995.

GAO. "Military Readiness: A Clear Policy is Needed to Guide Management of Frequently Deployed Forces." *GAO Report*. Washington, DC: Government Printing Office, April 1996.

Joint Chiefs of Staff. Joint Pub 3-07, *Joint Doctrine for Military Operations Other Than War*. Washington, DC: JCS, 16 June 1995.

Krulak, Charles, Marine Commandant. *USMC Posture Statement*, Quantico, VA: Headquarters, US Marine Corps, 1997.

Office of Chief of Staff. *United States Army Posture Statement FY98*. Washington, DC: Department of the Army, February 1997.

_____. *United States Army Posture Statement FY99*. Washington, DC: Department of the Army, February 1998.

_____. *United States Army Posture Statement FY00*. Washington, DC: Department of the Army, February 1999.

New World Coming: American Security in the 21st Century. The United States Commission on National Security/21st Century. Washington, DC: Government Printing Office, 15 September 1999.

Transforming Defense, National Security in the 21st Century. Report of the National Defense Panel. Washington, DC: Government Printing Office, December 1997.

Shalikashvili, John. *National Military Strategy*. Washington, DC: JCS, 1997.

Shinseki, Eric. "The New Army Vision." Army Press Release, Washington, DC: Army Press Office, 12 October 1999.

Internet

Lippman, Walter. In *Transforming Defense, National Security in the Twenty-First Century*. National Defense Panel. Washington, DC: Government Printing Office, 1999. Accessed 10 January 2000. Available from <http://www.nssg.gov>. Internet.

US Congress. House. Committee on Armed Services. *Military Readiness*: Hearing before the Committee on Armed Services. 106th Cong., 1st sess., 22 March 1999; Available from <http://www.house.gov/hasc/testimony/106thcongress>. Internet. Accessed 10 February 2000.

Interviews and Speeches

Albright, Madeleine. Comments to the national press on the expanded role of the military in international affairs, November 1999.

Armitage, Ambassador. Guest lecture remarks, Carlisle Barracks, PA: US Army War College, May 1998.

Bush, George W. Comments during Republican Presidential debates, December 1999.

Carlile, Tori. Author notes from service on the Joint Staff/J6 1996-1997 and at the Joint Spectrum Center 1997-1999, Annapolis, MD, July 1999.

Cragin, Charles, Honorable, Principal Deputy Assistant Secretary of Defense for Reserve Affairs. Reserve Component CGSC graduation speaker, Fort Leavenworth, KS, 17 December 1999.

Hadden, Billy, Lieutenant Colonel. "Medium-weight Brigade O & O Plan." interview by author. Fort Leavenworth, KS: CAC, October 1999-March 2000.

Hamre, John. Remarks provided to the National Security Telecommunications Advisory Committee, Washington, DC, 9 June 1999.

Wolfe, Timothy, Lieutenant Colonel. Interview by author, MacDill, AFB, Tactical Communications Conference, January 1999.

Theses

Beck, William. "Tao of War; Balance in the National Military Strategy." Master's thesis, Fort Leavenworth, KS: US Army Command and General Staff College, April 1997.

Cranford, Teddy. Coping with Change: "Operational Art and Force XXI." Master's thesis. Fort Leavenworth, KS: US Army Command and General Staff College, May 1996.

Garland, Keith. "Nonlethal Weapons: Impact and Utility Concerns for Operational Commanders in Future Conflicts." Master's thesis, Fort Leavenworth, KS: US Army Command and General Staff College, February 1998.

Grigsby, Wayne. "The Current Interwar Years: Is the Army Moving in the Correct Direction?" Master's thesis, Fort Leavenworth, KS: US Army Command and General Staff College, May 1996.

Heinemann, Timothy. "Full-Dimension Operations Planning Constructs: Thinking 'Out of the Box' for the 21st Century." Master's thesis, Fort Leavenworth, KS: US Army Command and General Staff College, May 1995.

Heller, Charles. "Twenty-First Century Force: A Federal Army and a Militia." Master's Thesis, US Army Command and General Staff College. June 1993.

Jones, Brian. "What are the Risks of Building a High Tech, Narrowly Focused Army?" Master's thesis, Fort Leavenworth, KS: US Army Command and General Staff College, May 1996.

- Reinwald, Brian. "Forsaken Bond: Operational Art and the Moral Element of War." Master's thesis, Fort Leavenworth, KS: US Army Command and General Staff College, May 1998.
- Shananan, Brian. "Joint Expeditionary Forces: A Step Beyond." Master's thesis, Fort Leavenworth, KS: US Army Command and General Staff College, February 1998.
- Smith, John. "Avoiding Agincourt - Restructuring Command and Control for the 21st Century." Master's thesis, Fort Leavenworth, KS: US Army Command and General Staff College, May 1998.
- Stewart, Michael. "Small View of War: Toward a Broader FM 100-5." Master's thesis, Fort Leavenworth, KS: US Army Command and General Staff College, May 1996.
- Vandiver, Richard. "Reflections on the Signal Corps: The Power of Paradigms in Ages of Uncertainty." Master's thesis, Fort Leavenworth, KS: US Army Command and General Staff College, April 1995.
- Wasson, James. "Innovator or Imitator: Napoleon's Operational Concepts and the Legacies of Bourcet and Guibert." Master's thesis, Fort Leavenworth, KS: US Army Command and General Staff College, May 1998.

INITIAL DISTRIBUTION LIST

1. Combined Arms Research Library
U.S. Army Command and General Staff College
250 Gibbon Ave.
Fort Leavenworth, KS 66027-2314

2. Defense Technical Information Center/OCA
8725 John J. Kingman Rd., Suite 944
Fort Belvoir, VA 22060-6218

3. Dr. James Schneider
School of Advanced Military Studies
USACGSC
1 Reynolds Ave.
Fort Leavenworth, KS 66027-1352

4. LTC Nathaniel Stevenson
Department of Joint Military Operations
USACGSC
1 Reynolds Ave.
Fort Leavenworth, KS 66027-1352

5. MAJ Steven Rauch
Department of Combat Studies
USACGSC
1 Reynolds Ave.
Fort Leavenworth, KS 66027-1352

6. Dr. Bruce Menning
Department of Joint Military Operations
USACGSC
1 Reynolds Ave.
Fort Leavenworth, KS 66027-1352

1. Certification Date: 2 April 2000
2. Thesis Author: Major Tori R. Carlile
3. Thesis Title: The US Army: A Relevant Force--Leapfrogging to the Twenty-first Century
4. Thesis Committee Members James Schneider, Ph.D., LTC Nathaniel Stevenson Jr.,

MAJ Steven Rauch

James J. Schneider
Nathaniel Stevenson, Jr.
Steve Rauch

A B C D E F X

If your thesis does not fit into any of the above categories or is classified, you must coordinate with the classified section at CARL.

EXAMPLE

<u>Limitation Justification Statement</u>	<u>/</u>	<u>Chapter/Section</u>	<u>/</u>	<u>Page(s)</u>
<u>Direct Military Support (10)</u>	<u>/</u>	<u>Chapter 3</u>	<u>/</u>	<u>12</u>
<u>Critical Technology (3)</u>	<u>/</u>	<u>Section 4</u>	<u>/</u>	<u>31</u>
<u>Administrative Operational Use (7)</u>	<u>/</u>	<u>Chapter 2</u>	<u>/</u>	<u>13-32</u>

<u>Limitation Justification Statement</u>	<u>Chapter/Section</u>	<u>Page(s)</u>

Erin Carline

STATEMENT A: Approved for public release; distribution is unlimited. (Documents with this statement may be made available or sold to the general public and foreign nationals).

STATEMENT B: Distribution authorized to U.S. Government agencies only (insert reason and date ON REVERSE OF THIS FORM). Currently used reasons for imposing this statement include the following:

1. Foreign Government Information. Protection of foreign information.
2. Proprietary Information. Protection of proprietary information not owned by the U.S. Government.
3. Critical Technology. Protection and control of critical technology including technical data with potential military application.
4. Test and Evaluation. Protection of test and evaluation of commercial production or military hardware.
5. Contractor Performance Evaluation. Protection of information involving contractor performance evaluation.
6. Premature Dissemination. Protection of information involving systems or hardware from premature dissemination.
7. Administrative/Operational Use. Protection of information restricted to official use or for administrative or operational purposes.
8. Software Documentation. Protection of software documentation - release only in accordance with the provisions of DoD Instruction 7930.2.
9. Specific Authority. Protection of information required by a specific authority.
10. Direct Military Support. To protect export-controlled technical data of such military significance that release for purposes other than direct support of DoD-approved activities may jeopardize a U.S. military advantage.

STATEMENT C: Distribution authorized to U.S. Government agencies and their contractors: (REASON AND DATE). Currently most used reasons are 1, 3, 7, 8, and 9 above.

STATEMENT D: Distribution authorized to DoD and U.S. DoD contractors only; (REASON AND DATE). Currently most reasons are 1, 3, 7, 8, and 9 above.

STATEMENT E: Distribution authorized to DoD only; (REASON AND DATE). Currently most used reasons are 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10.

STATEMENT F: Further dissemination only as directed by (controlling DoD office and date), or higher DoD authority. Used when the DoD originator determines that information is subject to special dissemination limitation specified by paragraph 4-505, DoD 5200.1-R.

STATEMENT X: Distribution authorized to U.S. Government agencies and private individuals of enterprises eligible to obtain export-controlled technical data in accordance with DoD Directive 5230.25; (date). Controlling DoD office is (insert).